AN ANNOTATED LISTING OF ORIGINAL FIELD DATA BOOKS AND DIARIES OF ONTARIO FISHERIES RESEARCH LABORATORY WORKERS (1921-1948)

1984
ONTARIO FISHERIES
TECHNICAL REPORT SERIES
NO. 11

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Ontario Ministry of Natural Resources
Fisheries Branch, Queen's Park
Toronto, Ontario, M7A 1W3

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David O. Evans
Ontario Ministry of Natural Resources
Research Section, Fisheries Branch
Maple, Ontario L0J 1E0

and

Bonnie A. Campbell
Ontario Ministry of Natural Resources
Research Section, Fisheries Branch
Maple, Ontario L0J 1E0

K.H. Loftus, Editor

Ontario
Ministry of Natural Resources

Hon. Alan W. Pope
Minister

John R. Sloan
Deputy Minister

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ABSTRACT

Evans, D. O., and B. A. Campbell. 1982. An Annotated Listing of Original Field Data Records and Diaries of Ontario Fisheries Research Laboratory Workers (1921-1948). Ont. Fish. Tech. Rep. Ser. No. 11:iii & 37p.

An incomplete collection of ninety-one original field record books of Ontario Fisheries Research Laboratory workers, 1921-1948, presently held by the Ontario Ministry of Natural Resources, Research Library, Maple, is listed and annotated. Similar records known to exist elsewhere are also listed, but not annotated. Contents include field trip diaries, accounts, and original data records of limnological, benthic, entomological, fisheries and general aquatic surveys of Ontario lakes and streams. Primary survey locations are Lake Nipigon, Lake Nipissing, and small lakes and streams in Algonquin Park and southern Ontario, although information is included for many other locations.

Keywords: Ontario, aquatic survey, historical data, fisheries, annotated field records, Ontario Fisheries Research Laboratory, Lake Nipigon, Lake Nipissing, Algonquin Park

AN ANNOTATED LISTING OF ORIGINAL FIELD DATA BOOKS AND DIARIES OF ONTARIO FISHERIES RESEARCH LABORATORY WORKERS (1921-1948)

INTRODUCTION

During the period 1920-1922, faculty of the Department of Biology, University of Toronto, initiated a program for "investigation of the water areas of Ontario with reference to existing biological conditions and economic problems" (Bensley 1922). General limnology, conservation and fisheries were identified as primary areas upon which the biological investigation of provincial waters would focus. During 1921, the new subgroup within the Department of Biology, to be known as the Ontario Fisheries Research Laboratory, began field investigations on Lake Nipigon under the direction of Professor W.A. Clemens. Investigations continued over a period of five decades, resulting in some 74 publications in the University of Toronto Studies, Biological Series.

Of particular significance is the existence of many of the original field note books and diaries of the various researchers of the Ontario Fisheries Research Laboratory. At present, these documents are housed in three primary locations: (1) Archives, Royal Ontario Museum; (2) Department of Zoology Library, University of Toronto; and (3) Research Library, Ontario Ministry of Natural Resources. Many of the field books contain original data records which form the basis of the scientific publications noted above, and others contain unpublished information. In either case, existence of the original records provides a potentially valuable opportunity to appraise historical ecological data from a present day perspective.

The nature of the present materials does not readily facilitate annotation as the records are, in most cases, simply compilations of numerical data or they are written in abbreviated field notations. The annotations provided here are simply intended to serve as a general guide for researchers interested in detailed examination of the original materials.

The following information is recorded for each record book:

1. Title. If not given, a descriptive title was assigned.

2. Author or project leader. Sometimes this was presumed from handwriting or letters/ notes contained in the books.

3. Date and duration of study. Some record books span a period of up to seven years, but information was usually entered only during the summer months.

4. Number of pages. This was estimated in unnumbered field notes.

5. Description of contents. The material is described in very general terms. Emphasis is placed on identifying what was done and on listing the species, biotic communities and geographical areas investigated, not on interpreting or evaluating of the information.

DESCRIPTION OF MATERIALS

The present materials include diaries, logs and field data books of members of the Ontario Fisheries Research Laboratory. The collection consists of ninety three record books. Nineteen books contain information on Lake Nipigon; twenty-one, Lake Nipissing. Twenty books concern the Algonquin Park area. The remaining records deal primarily with southern Ontario lakes, ponds and streams. Areas of Georgian Bay, Quebec and the maritime provinces were also investigated.

Information recorded includes fish diversity, abundance, morphology, stomach contents and identifications of benthic invertebrates. Air and water temperatures were usually recorded and several books include water chemistry records. Depth soundings were reported for some locations on Lake Nipigon and for many Algonquin Park lakes. Two records contain behavioral notes on nesting in smallmouth bass.

Details concerning dates, locations, sampling equipment and methodology were often missing from individual records but, in many cases, could be discerned by cross-referencing. For this reason, annotation and collation of these materials should enhance their value.

Table 1 summarizes the records by date, location, author and general subject; Table 2 provides a cross listing by author. Table 3 provides a key to the species of fish reported in each record book. Table 4 provides a listing of the annotated records, and Table 5 lists record books known to exist elsewhere. To further facilitate cross-referencing of materials, the Publications of the Ontario Fisheries Research Laboratory appearing in the University of Toronto Studies, Biological Series 1922-1956, are listed in the Appendix. Record books in the Ministry of Natural Resources, Research Library, Maple, Ontario, have been affixed with index labels corresponding to the record numbers 1 to 93 reported herein.

DISCUSSION

During the course of this investigation of historical Ontario fisheries information, it has become evident that a relatively large number of original field record books of pioneer workers active during the first half of the present

century continue to exist. Members of the Ontario Fisheries Research Laboratory, Department of Biology, University of Toronto, have been the major contributors to this record. Many of their contributions are formally recorded in the University of Toronto, Biological Series, 1922-1956. The value of the original field data books of these workers lies primarily in providing an unabridged historical record and in providing original data for new analyses.

The present annotation is intended only as an initial step in organizing and cataloguing these materials. Clearly, the present listing and annotation is incomplete. In particular, the materials housed by the University of Toronto and the Royal Ontario Museum may be more extensive than indicated here (Table 5). As noted earlier, the record books are presently housed in three geographically and administratively discrete institutions. In several cases, record books from serial collections by single authors are housed at different locations, causing unnecessary discontinuities in the record. To facilitate preservation and appropriate archiving of these records, it would seem beneficial to assemble the entire collection under the auspices of a single guardian. The Province of Ontario Archives may be a suitable location, in view of the facilities available and their accessibility to researchers.

ACKNOWLEDGEMENTS

We acknowledge with appreciation the assistance of Ann Chalk of the Ontario Ministry of Natural Resources, Research Library, Maple. We thank Tom Whillans, University of Toronto, for information on materials held in the Department of Zoology and by the Royal Ontario Museum.

LITERATURE CITED

Rensley, B. A. 1922. A plan for the biological investigation of the water areas of Ontario. Univ. Toronto Stud., Biol. Ser. No. 20. Publ. Ont. Fish. Res. Lab. No. 1:3-23.

Table 1. Summary of record books by year, location, author and subject.

Record book	Year	Location	Author	Subject
1	1921	L. Nipigon	Harkness, W.J.K Bigelow, N.K.	Fish size; stomach contents; plankton
2	1922-3	L. Nipigon	Harkness, W.J.K. Bigelow, N.K.	Fish size; stomach contents; plankton
3	1921-3	L. Nipigon	Harkness, W.J.K. Bigelow, N.K.	Fish size; stomach contents; plankton
4	1921	L. Nipigon	Harkness, W.J.K.	Benthos; depth sounding
5	1921	L. Nipigon	Harkness, W.J.K.	Benthos; depth sounding
6	1920-7	L. Nipigon, Bay of Quinte	Anonymous	Fish morphology (yellow perch)
7	1921-7	Various, Ont.	Anonymous	Trout distribution; some morphology
8	1921-8	L. Nipigon, L. Erie, Bay of Quinte, Georgian Bay	Clemens, W.A. et al.	Water chemistry, water temperature; depth sounding; benthos
9	1922	L. Nipigon	Harkness, W.J.K.	General survey[a]; depth soundings
10	1922	L. Nipigon	Harkness, W.J.K.	General survey[a]; detailed morphology for sturgeon; depth sounding
11	1922	L. Nipigon	Bigelow, N.K.	Fish size; stomach contents
12	1923-8	L. Nipigon, Long Lac, Bay of Quinte	Hart, J.L.	Aquatic survey[b]; fish stomach contents
13	1922-4	Devil's L.	Harkness, W.J.K.	Photographic plates (sturgeon eggs)
14	1924	L. Nipigon, Long Lac	Harkness, W.J.K.	Aquatic survey[b]; depth sounding
15	1924-31	L. Nipigon	Harkness, W.J.K.	Aquatic survey[b]; depth sounding
16	1924-30	L. Nipigon, L. Erie, others	Harkness, W.J.K.	Fish morphology; stomach contents
17	1925	L. Nipigon	Harkness, W.J.K.	Aquatic survey[b]
18	1926	L. Nipigon, Bay of Quinte	Hart, J.L.	Fish size; stomach contents
19	1926	L. Nipigon	Anonymous	Fish morphology; depth sounding
20	1926	L. Nipigon	Anonymous	Benthos; air and water temperature; water chemistry; depth sounding
21	1926	L. Nipigon, L. Nipissing, Long Lac	Harkness, W.J.K.	Aquatic survey[b]; air and water temperatures; depth sounding
22	1927	Bay of Quinte	Harkness, W.J.K. Hart, J.L.	Stomach contents of yellow perch et al.

Table 1 continued on page 4.

Table 1. Summary of record books by year, location, author and subject (continued).

Record book	Year	Location	Author	Subject
23	1927-8	Ontario, Quebec	Ricker, W.E.	Fish size; stomach contents (brook trout)
24	1927-8	L. Ontario	Anonymous	Fish size; stomach contents
25	1927-8	Clear L. Buck L. Little Clear L.	Harkness, W.J.K.	Fish morphology; general survey[a]
26	1928-30	Various, Ont.	Ricker, W.E.	Fish size; stomach contents
27	1928	Various, Ont.	Ricker, W.E.	Benthos
28	1928	Various, Ont.	Miller, G.W.	Aquatic survey[b]
29	1927-9	Lac Seul, Turtle L., Clear L., Little Clear L.	Spaulding, E.G.	Fish morphology; age; growth rate; stomach contents
30	1928	L. Nipissing	Pentland, E.S.	Air and water temperature; water chemistry; fish count
31	1928	Unknown	Anonymous	Accounts
32	1928-34	L. Nipissing	Oughton, J.	Benthos manuscript
33	1928-34	L. Nipissing	Oughton, J.	Benthos
34	1928	Southern Ont., Hornings Mills, Collingwood	Ide, F.P.	Aquatic survey; insect collection; streams and ponds
35	1928-29	Southern Ont., Inglewood, Credit R., French R.	Ide, F.P.	Aquatic survey; insect collection; personal diary[c]
36	1930	Southern Ont., Mad R., Glen Huron, Muskoka	Ide, F.P.	Aquatic survey; insect collection; trip diary
37	1931	Southern Ont., Hornings Mills, Singhampton, Noisy R.	Ide, F.P.	Aquatic survey; insect collection; personal diary[c]
38	1934-39	Southern Ont. Ottawa R., Algonquin Park, Credit R., Don R.	Ide, F.P.	Aquatic survey; insect collection; trip and field diary
39	1929	L. Nipissing	Anonymous	Air and water temperature; water chemistry; water levels
40	1929	L. Nipissing	Fry, F.E.J.	Gill net record
41	1929-32	L. Nipissing Trout L. (east of Nipissing)	Anonymous	Fish sampling by netting and angling; catch data; fish size; dead fish collections

Table 1 continued on page 5.

Table 1. Summary of record books by year, location, author and subject (continued).

Record book	Year	Location	Author	Subject
42	1929-30	Ontario	Fallis, A.M.	Chem. Lab. notes; plant lists
43	1924-30	L. Nipissing	Harkness, W.J.K.	General survey[a]
44	1930	L. Nipissing	Anonymous	Fish size; stomach contents
45	1930	Various, Ont.	Ricker, W.E.	Benthos
46	1930	Various, Ont, Que., E. Coast	Ricker, W.E.	Fish size; stomach contents
47	1930	L. Nipissing	Corkill, J.M.B.	Air and water temperature; water chemistry
48	1931	L. Nipissing	Corkill, J.M.B.	Air and water temperature; water chemistry
49	1932	L. Nipissing	Corkill, J.M.B.	Air temperature; water chemistry; water levels
50	1933	L. Nipissing	Corkill, J.M.B.	Air temperature; water level
51	1930-2	L. Nipissing, Prince Albert Nat'l Park	Langford, R.	Aquatic survey[b]; field notes
52	1930-7	High Hills Pond, Ont.	Ostler, B.	Fish planting; fish size
53	1931-7	High Hills Pond, Ont.	Ostler, B.	Fish size
54	1929-32	L. Nipissing	Skelton, E.G.	Fish size; stomach contents
55	1932	L. Nipissing	Skelton, E.G.	Fish size; stomach contents
56	?	L. Nipissing	Skelton, E.G.	Fish feeding experiment
57	1928-33	L. Nipissing	Skelton, E.G.	Fish morphology
58	1933	L. Nipissing	Fry, F.E.J.	Gill net record
59	1934	Unknown	Anonymous	Accounts
60	1934-7	High Hills, Ontario	Ostler, B.	Fish size
61	1935	Various, Ont.	Harkness, W.J.K.	General survey[a]
62	1935	L. Nipissing	Fry, F.E.J.	Fish morphology; gill net record
63	1935	Algonquin Park	Dymond, J.R.	Fish survey
64	1936	Algonquin Park	Fry, F.E.J.	Creel census
65	1936	Algonquin Park	Anonymous	Fish survey; fish diet
66	1936-7	Algonquin Park	Anonymous	Fish survey; fish morphology

Table 1 continued on page 6.

Table 1. Summary of record books by year, location, author and subject (continued).

Record book	Year	Location	Author	Subject
67	1936	Mitchells Bay (NE Georgian Bay)	Doan, K.H.	Bass nesting; air and water temperatures
68	1936	Georgian Bay	Doan, K.H.	Fish size; bass nesting; nest description, observation
69	1937	Algonquin Park	Harkness, W.J.K.	Field notes, work notes
70	1937-8	Algonquin Park	Harkness, W.J.K.	Fish diet, field notes
71	1937	Algonquin Park	Doan, K.H.	Fish survey; smallmouth bass; length; weight; diet
72	1937	Algonquin Park	Anonymous	Fish survey; cyprinid distribution
73	1937	Various, S. Ont. streams, rivers (Nobleton-Aurora)	Anonymous	Aquatic survey[a]; air temperature
74	1938-40	Various, Ont.	Harkness, W.J.K.	Air and water temperature; water chemistry
75	1938-9	Mona Centre, High Lake	Tidy, W.	Fish size; stomach contents
76	1936-41	Algonquin Park	Langford, R.R., Kennedy, W.A.	Depth soundings
77	1938-40	Algonquin Park	Kennedy, W.A.	Fish survey
78	1939	Algonquin Park, L. Erie	Kennedy, W.A.	Fish survey; perch morphology
79	1939	Toronto, S. Ontario	Harkness, W.J.K.	Personal diary[c]
80	1940	Algonquin Park	Kennedy, W.A.	Fish survey
81	1940	Algonquin Park	Kennedy, W.A.	Fish survey
82	1941-3	Lac St. Louis, Que., L. Erie	Harkness, W.J.K.	Sturgeon, morphology
83	1944	Algonquin Park	Long, J.A.	Fish survey; limnology; temperature; oxygen
84	1944	Algonquin Park	Martin, N. D.	Creel census
85	1937-44	Quetico	Skinner, J.	General survey[a]; ecology; park
86	1944-5	Algonquin Park	McGraw, B.	Creel census; fish stomach contents
87	1946	Algonquin Park	Harkness, W.J.K.	Personal diary[c]
88	1946	Sibley Park, L. Superior	Anonymous	Fish survey; gillnet
89	1947	Algonquin Park	Baldwin, N.S., Martin, N.D.	Fish survey; limnology; temperature; oxygen

Table 1 continued on page 7.

Table 1. Summary of record books by year, location, author and subject (continued).

Record book	Year	Location	Author	Subject
90	1947	Algonquin Park	Martin, N.V.	Fish survey; soundings
91	1947-8	Algonquin Park	Baldwin, N.S., Martin, N.V.	Fish survey; creel census
92	1948	Wilmot Creek, L. Ontario	Baldwin, N.S.	Stream survey
93	?	Ontario	Anonymous	Muskellunge distributional notes

[a] General survey means mainly non-systematic information including personal notes, work details and incidental observations. May include notes on equipment (net size, dredges), general weather, some incomplete lists of species (flora, fauna - including fish).

[b] Aquatic survey means a preliminary aquatic surviey without specific objectives but directed towards aquatic flora and fauna.

[c] Personal diary means little or no details of field work; primarily trip diaries.

Table 2. Listing of record books by author.

Name	Record book number
Anonymous	6, 7, 19, 20, 24, 31, 39, 41, 44, 59, 65, 66, 72, 73, 88, 93
Baldwin, N.S.	89, 91, 92
Bigelow, N.K.	1, 2, 3, 11
Clemens, W.A.	8
Corkill, J.J.R.	47, 48, 49, 50
Doan, K.H.	67, 68, 71
Dymond, J.R.	63
Fallis, A.M.	42
Fry, F.E.J.	40, 58, 62, 64
Harkness, W.J.K.	1, 2, 3, 4, 5, 8, 9, 10, 13, 14, 15, 16, 17, 21, 22, 25, 43, 61, 69, 70, 74, 79, 87
Hart, J.L.	12, 18, 22
Ide, F.P.	34, 35, 36, 37, 38
Kennedy, W.A.	76, 77, 78, 80, 81
Langford, R.	51, 76
Long, J.A.	83
Martin, N.D.	84, 89
Martin, N.V.	90, 91
McGraw, B.	86
Miller, G.W.	28
Ostler, B.	52, 53, 60
Oughton, J.	32, 33
Pentland, E.S.	30
Ricker, W.E.	23, 26, 27, 45, 46
Skelton, E.G.	54, 55, 56, 57
Skinner, J.	85
Spaulding, E.G.	29
Tidy, W.	75

Table 3(i). Fish species or family code.

Species	Code	Species	Code	Species	Code
Atlantic salmon	AS	Northern pike	NP	Tesselated darter	TD
Rainbow trout	RT	Walleye	WE	Red bellied dace	RB
Brook trout	BT	Yellow perch	YP	Blacknose dace	BD
Brown trout	BN	Pike perch	PP	Long-nosed dace	LD
Lake trout	LT	Sauger	SA	Spottail minnow	SP
Lake whitefish	WF	Smallmouth bass	SM	Spottail shiner	SS
Round whitefish	RW	Largemouth bass	LM	Emerald (lake) shiner	ES
Lake herring	LH	Other Centrarchidae	CT	Common shiner	CR
Northern sucker	NS	Trout perch	TP	Creek chub	CB
Common sucker	CS	Log perch	LP	Other Cyprinidae	OC
Red horse sucker	RS	Gasterosteidae	GA	Alewife	AW
Ling	LG	Cottidae	CO	American eel	AE
Sturgeon	ST	Carp	CP	Sea lamprey	SL
Other Catastomidae	CA	Rainbow darter	RD	Ictaluridae	IC
Muskellunge	MK	Iowa darter	ID		

Table 3(ii). Listing of fish species mentioned in each record book.

Record Book	AS	RT	BT	BN	LT	WF	RW	LH	NS	CS	RS	LG	ST	CA	MK	NP	WE	YP	PP	SA	SM	LM	CT	TP	LP	GA	CO	CP	RD	ID	TD	RB	BD	LD	SP	SS	ES	CR	CB	OC	AW	AE	SL	IC
1					x	x	x	x	x	x		x	x					x			x			x							x				x				x					
2			x		x	x	x	x	x	x	x	x				x		x	x	x	x			x	x	x	x			x	x			x	x		x		x				
3						x			x	x								x						x		x				x	x				x	x	x						
4																																													
5							x		x	x		x	x				x	x	x							x	x				x				x				x					
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14						x				x						x		x	x																										
15										x			x				x		x																										
16													x																																

Table 3(ii) continued on page 9.

Table 3(ii). Listing of fish species mentioned in each record book (continued).

Record Book	AS	RT	BT	BN	LT	WF	RW	LH	NS	CS	RS	LG	ST	CA	MK	NP	WE	YP	PP	SA	SM	LM	CT	TP	LP	GA	CO	CP	RD	ID	TD	RB	BD	LD	SP	SS	ES	CR	CB	OC	AW	AE	SL	IC
17						x	x	x	x	x						x			x																										
18						x																																						
19						x																																						
20																																												
21						x				x						x	x	x																										
22																		x						x											x								
23			x															x																										
24					x		x					x																																
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26		x	x		x					x																																	
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28																																												
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42																	x	x			x		x	x		x				x					x								
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55						x				x	x	x		x		x	x	x					x																				
56														x		x	x	x					x																				
57																x	x	x					x																				

Table 3(ii) continued on page 10.

Table 3(ii). Listing of fish species mentioned in each record book (continued).

Record Book	AS	RT	BT	BN	LT	WF	RW	LH	NS	CS	RS	LG	ST	CA	MK	NP	WE	YP	PP	SA	SM	LM	CT	TP	LP	GA	CO	CP	RD	ID	TD	RB	BD	LD	SP	SS	ES	CR	CB	OC	AW	AE	SL	IC
58						X		X		X		X				X	X	X			X		X																					
59																																												
60		X	X																																									
61																																												
62						X		X				X				X	X																											
63					X				X	X								X			X		X			X						X	X				X	X	X			X	
64																																												
65					X			X		X								X			X		X														X	X	X				X
66			X	X	X	X	X	X	X	X		X						X			X		X																	X			
67																					X																X					X		X
68																					X																						
69																X	X				X		X																					
70					X																																							
71					X				X	X																																	
72			X		X		X		X			X						X			X																						
73										X								X					X									X	X			X	X	X	X			X	
74																											X												X	X				
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84			X		X					X					X		X	X			X																						X	
85						X		X					X	X	X	X	X	X			X		X																				X	
86						X		X			X						X	X			X																							
87																	X				X		X																				X		X
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89			X		X		X							X				X								X	X																	
90			X		X				X	X								X																									X	
91			X		X		X			X													X									X					X	X	X				
92	X		X	X						X				X				X					X														X							
93															X									X		X		X			X	X	X					X	X		X		

Table 4. Chronological listing and annotation of record books.

RECORD BOOK NO. 1
Harkness, W. J. K., and N. K. Bigelow. 1921. Fish food, Lake Nipigon, 1921. Field notebook. 100p. Handwritten. (Authorship presumed, based on handwriting.)
Location: Lake Nipigon (lake-wide study: approx. 15 sampling locations).
Duration: 2 months (July-August); presumed to be part of series.
Description: Identification of stomach contents of fish, and plankton. Unnumbered pages: approx. 10 additional sampling locations. Species examined (13): sturgeon (20), common whitefish (60), round whitefish (10), northern suckers (20), common suckers (100), ling (100), yellow pike perch (30), lake trout (40), blackfin herring (80), moon-eye herring (10), spottail minnow (30), smallmouth black bass (10), trout perch (20). Some fish lengths given; some percent composition of gut contents given.
Equipment: Some references to other records (for black bass, referred to seine and plankton records; pound net used for sturgeon [referred to Adamstone]); gill net record referred to for whitefish; for herring, 1 1/2" seine net mentioned (July 20); 1 1/2" seine mentioned for yellow perch; and seine record 9c referred to J.
Note: This data used in report for 1921.
Numbered pages: (1-41a) Approx. 15 sampling locations.
Species examined (10): Common whitefish (80), lake trout (10), common sucker (30), northern sucker (30), round whitefish (40), herring (30), sturgeon (10), cisco (70), yellow perch (20), ninespine stickleback (10), tesselated darter (20). Lengths given.

Keywords: Aquatic survey, fisheries, zooplankton, fish, stomach contents.

RECORD BOOK NO. 2
Harkness, W. J. K., and N. K. Bigelow. 1922-23. Fish food, Lake Nipigon, No. 2, 1922-23. Field notebook. 270p. (Authorship presumed, based on handwriting.)
Location: Lake Nipigon (lake-wide study: approx. 18 sampling locations).
Duration: 2 years; presumed to be part of series.
Description: Identification of stomach contents of fish. Fish length and percent composition of stomach contents given. Species examined (1922-1923): Lake trout (10/40), ling (50/>100), herring (<10/0), cisco (50/10), spottail minnow (40/20), whitefish (common) (40/10), round whitefish (<10/20), pike (20/10), pike perch (40/40), speckled trout (1/0), sauger (<10/20), northern sucker (20/<10), common sucker (30/40), red horse sucker (<10/0), Notropis atherinoides (10/<10), yellow perch (<10/60), smallmouth black bass (<10/<10). The following species listed for 1923 only: brook trout (20), ninespine stickleback (10), brook stickleback (10), tesselated darter (20), long-nosed dace (10), trout perch (10), Iowa darter (20), Triglopsis thompsonii (deepwater sculpin) (10), Cottus franklinii (10), log perch (10), Couesius plumbeus (10).
Equipment: Not noted, but see page 84.

Keywords: Aquatic survey, fisheries, benthos, fish stomach contents.

RECORD BOOK NO. 3
Harkness, W. J. K., and N. K. Bigelow. 1921-22-23. Fish food, Lake Nipigon 1921-22-23. Field notebook. 90p. 1921 p.1-50. (Authorship presumed, based on handwriting.)
Location: Lake Nipigon (lake-wide study: appox. 15 sampling locations).
Duration: 3 years; presumed to be part of series.
Description: Identification of stomach contents of fish. Fish length and percent composition of stomach contents given. Species examined (no. of individuals): common whitefish (40), northern suckers (10), common suckers (30), yellow perch (100), ninespine stickleback (40), brook stickleback (10), tesselated darter (30), Iowa darter (10), trout perch (10), Notropis atherinoides (10), N. hudsonius (10). Sampling methods/equipment not given. One reference to gill net records.

Keywords: Aquatic survey, fisheries, benthos, fish stomach contents.

RECORD BOOK NO. 4
Harkness, W. J. K. 1921. Sound II, Biology. Field notebook. 72p., numbered 147-219.
Location: Lake Nipigon.
Duration: 2 months; presumed to be part of series.

Table 4 continued on page 12.

Table 4. Chronological listing and annotation of record books (continued).

Description: Approx. 180 dredging samples from 12 series (numbered 10-32). Most depths approx. 1-15 m. Maps given for series; appears to be near Shakespeare Island. Bottom fauna (insects and mollusks) enumerated. Materials and methods not given. One drag dredge mentioned for series 1. Refer to Record Book Nos. 5 and 8.

Keywords: Aquatic survey, benthos.

RECORD BOOK NO. 5
Harkness, W. J. K. 1921. Lake Nipigon field investigation (assigned title). Field notebook. 146p.
Location: Lake Nipigon.
Duration: 4 months (June-September 1921).
Description: Some observations of weather, birds, flora. Daily notes with details of some studies (dredging, plankton, fish nets). Pp. 124-146: contain dredging series 1-9 (approx. 70 samples) (1921). (See Record Book Nos. 4 and 9). Supplemental information on materials, methods, location of studies (Lake Nipigon). Spring-jawed dredge 9 x 9" = 81" sq. used for dredging series. Mention of 1 1/2" and 3" gill nets. Locations of nets. One note of net 400' long, with 50 corks, 8' apart. P. 28: lists whitefish (1000), ling (100), trout (14), herring (13) caught in nets. P. 106: lists "Collection of vertebrates 1921": banded stickleback, Miller's thumb, long-nosed dace, chub, pike-perch, sturgeon, northern sucker, ling, tesselated darter, perch, common sucker, pickerel, round whitefish.

Keywords: General survey, fisheries, benthos.

RECORD BOOK NO. 6
Anonymous. 1920-27. Perch data. Field notebook. 50p. (10 loose leaf).
Location: Various: Lake Nipigon (Orient Bay, Gut Dump Bay); Bay of Quinte.
Duration: 7 years (1920-27).
Description: Perch measurements: date, girth, length, weight, age (by scale and otolith).

Keywords: Fisheries, yellow perch, length, weight, age.

RECORD BOOK NO. 7
Anonymous. 1921-27. Distribution of trout. Notebook. 20p. (10 loose leaf).
Location: Ontario.
Duration: 7 years (incomplete).
Description: Incomplete lists of areas in Ontario where lake trout are found. 2 loose pages of measurements of speckled trout in Ontario (incomplete): length, weight, sex, locality. 7 loose pages of locations in Ontario where the following species found: speckled trout, largemouth black bass, pike, lake trout, pike perch, smallmouth black bass, rainbow trout.

Keywords: Fisheries, lake trout, distribution, Ontario, speckled trout.

RECORD BOOK NO. 8
Clemens, W. A. 1921-28. Water temperature and analysis, Lake Nipigon. Includes notes by W. J. K. Harkness and J. R. Dymond and others. Field notebook. 120p.
Location: Lake Nipigon (various locations); some Georgian Bay and Port Credit.
Duration: 8 years; presumed to be part of series.
Description:
1921: 3 stations. Water and air temperatures, systematic recording of O_2, CO_2, free CO_2, $MO + H_2SO_4$, bicarbonate. Other records of weather, air and water temperatures. Methods for CO_2 determination given (p.5).
1922: 4 stations. Temperature, O_2, free CO_2, bicarbonate, acidity.
1923: 5 stations. Method for pH determination (P. 51). pH recorded.
1924: Note on p. 67 that "following data obtained and recorded by H.H. MacKay, copied from his record book for 1924..." by W.J.K. Harkness (1924). 9 stations plus various other locations (by bay name). Recording of: O_2, pH, CO_2, bicarbonate, alkalinity (pheno), acidity. Other air and water temperature readings (various locations).

Table 4 continued on page 13.

Table 4. Chronological listing and annotation of record books (continued).

1925: Some record of turbidity and temperature by J.R. Dymond.
1926: Water and air temperature recordings, approx. 6 locations.
1927: Air and water temperature, Port Credit (min. and max. air temperatures).
1928: Air and water temperature, Bay of Quinte. Also air and water temperatures, Georgian Bay (systematic, 5 stations). Maps of Georgian Bay stations. Temperatures over 6 smallmouth black bass nests (Georgian Bay). June-July maps.
Also, 2 loose pages of data for Lake Nipigon hydracarina study giving location, depth, distance from shore, and number of specimens taken for dredging series 1-11, 15, 16, 19, 22 (1922) and series 5, 8, 10, 12, 13 (1923). Diagram of Lake Nipigon included. (See Record Book Nos. 4 and 5.) 2 loose pages of data for hydrachnid study material sent to Dr. R. Marshall. Distribution of specimens (depth and distance from shore). Specimens from Lake Simcoe, Abitibi Lake. Letter to Dr. Marshall (1927).

Keywords: Aquatic survey, physical and chemical limnology.

RECORD BOOK NO. 9
Harkness, W. J. K. 1922. Field notes - sturgeon (assigned title). Diary. 90p.
Location: Lake Nipigon.
Duration: 3 months (1922, May-July).
Description: Personal diary and notes on ongoing work on Lake Nipigon. Notes on work on sturgeon; map.

Keywords: Sturgeon, Lake Nipigon.

RECORD BOOK NO. 10
Harkness, W. J. K. 1922. Diary and notes, 1922 (assigned title). Field notebook. 218p. (numbered 100-317).
Location: Lake Nipigon.
Duration: Approx. one year.
Description: Continuation of diary and work notes (see RECORD BOOK NO. 9). Lake Nipigon; maps; newspaper clippings (to p. 153). Miscellaneous information, costs of equipment, notes on gill net sizes (1 1/2", 3", 4 1/2") (to p. 169). Pp. 191-220: very detailed fish measurements (70 fish sampled) and descriptive notes (sturgeon). Pp. 230-291: sturgeon notes; stomach contents analyzed (enumeration and taxonomy); 67 samples.

Keywords: Aquatic survey, sturgeon, morphology, diet.

RECORD BOOK NO. 11
Bigelow, N. K. 1922. Food of small suckers, Lake Nipigon, 1922. Field notebook. 35p.
Location: Lake Nipigon.
Duration: Summer months; presumed to be part of series. See Record Book Nos. 1, 2 and 3.
Description: Identification (but not enumeration) of stomach contents of small suckers from approx. 10 different locations on Lake Nipigon. Fish lengths given; approx. 220 stomach samples.

Keywords: White sucker, diet.

RECORD BOOK NO. 12
Hart, J. L. 1923-28. Field notes of J. L. Hart (assigned title). 11p.
Location: Lake Nipigon; Long Lac; Bay of Quinte.
Duration: 6 years.
Description: Incidental notes on various fish; some stomach content description (approx. 10). Species: pike, whitefish (C. clupeaformis).

Keywords: Pike, whitefish, stomach contents.

Table 4 continued on page 14.

Table 4. Chronological listing and annotation of record books (continued).

RECORD BOOK NO. 13
Anonymous. 1922-24. Miscellaneous notes. 10p. (Presumed to be by W.J.K. Harkness, based on handwriting.)
Location: White Sand Creek; Devil's Lake.
Duration: 2 years.
Decription: Brief notes on photography of sturgeon eggs. Personal notes.

Keywords: Sturgeon, eggs.

RECORD BOOK NO. 14
Harkness, W. J. K. 1924-25. Diary 1924-25. Diary and field notes. 30 p.
Location: Lake Nipigon (and travelling to and from).
Duration: 1 month; presumed to be part of series. See Record Books listed in Table 2.
Description: Personal diary; general weather and work details; pencilled map; 3 short lists of fish caught in nets (perch, pike perch, whitefish, sucker). Map contains soundings of narrows near Long Lac.

Keywords: Personal diary, fish sampling, weather observation.

RECORD BOOK NO. 15
Harkness, W. J. K. 1924-31. Personal diary and field notes. 120p.
Location: Various (Alberta, Lake Nipigon).
Duration: 8 years (most data from summer 1924); part of series. See Record Books listed in Table 2.
Description: Personal diary and work notes. Begins west coast of Canada (May 1924). Lake Nipigon in May 9 1924; work details; mention of 10" and 4" nets (June 3, 1924); some temperature recordings for July 1924. Drawings of aquaria. Species mentioned: sturgeon (seemed to be object of study); other fish caught in gill nets included pickerel, pike perch, common sucker.

Keywords: Fisheries, sturgeon, fish sampling.

RECORD BOOK NO. 16
Harkness, W. J. K. 1924-30. Field data book 1924-30 (assigned title). 170p.
Location: Various (including Lake Nipigon, Lake Erie).
Duration: 7 years.
Description: Notes on how measurements were made for Lake Erie sturgeon. Approx. 20 measurements included. Approx. 35 stomach contents analyzed (taxonomy, enumeration, volume). Descriptions of plates for photographs of sturgeon eggs and fry (pp. 64-76). Approx. 50 samples of egg and fry development time (water and air temperature, stage of development). Approx. 60 fry measurements. Detailed measurements of sturgeon (mainly from Lake Nipigon). Approx. 70 samples (pp. 92-99) - ASRS 12. Measurements, miscellaneous sturgeon pp. 140-57 (approx. 40 samples).

Keywords: Sturgeon, morphology, stomach contents.

RECORD BOOK NO. 17
Anonymous. 1925. Field diary, 1925. 32p. (Presumed to be by W. J. K. Harkness, based on handwriting.)
Location: Lake Nipigon, near Shakespeare Island.
Duration: 2 months (August-September), presumed to be part of series. See Record Books listed in Table 2.
Description: Personal diary; notes on work details, weather. Mention of 70' seine net (p. 5); mention of gill net, mesh 1 1/2"-5" (pp. 48-49). Fish caught included suckers, whitefish, cisco, pike, sauger, perch, round whitefish. Data from September 10-14.

Keywords: Fish sampling.

Table 4 continued on page 15.

Table 4. Chronological listing and annotation of records books (continued).

RECORD BOOK NO. 18
Hart, J. L. 1926. Food of whitefish. 50p.
Location: Shakespeare Island Lake (Lake Nipigon); Bay of Quinte.
Duration: Summer 1926.
Description: Approx. 75 samples, stomach contents of whitefish of Lake Nipigon, percent composition. Approx. 15 samples of stomach contents (whitefish) Bay of Quinte.

Keywords: Lake whitefish, gut analysis.

RECORD BOOK NO. 19
Anonymous. 1926. Gill net record, Shakespeare Island Lake. 80p. (Possibly J. L. Hart.)
Location: Lake Nipigon.
Duration: 2 months (July-August); presumed to be part of larger study. See Record Book Nos. 18 and 20.
Description: 2 (loose) maps of Shakespeare Island Lake. Measurements of whitefish taken in Shakespeare Island Lake gill nets. Gill nets 1.5" - 5". Always set 18 hours. Systematic records of measurements of fish (length, girth, depth, width, weight, sex). Stomachs sometimes analyzed but no record of analysis here. 980 samples.

Keywords: Lake whitefish, length, weight.

RECORD BOOK NO. 20
Anonymous. 1926. Survey of Shakespeare Island Lake, June-August 1926. Field Notes. 100p. (Possibly J. L. Hart.)
Location: Lake Nipigon (Shakespeare Island Lake).
Duration: 3 months; presumed to be part of larger study. See Record Book Nos. 18 and 19.
Description: Loose papers: dredging series I, II, III, giving depth, nature of bottom, taxonomy and enumeration of benthic fauna (approx. 40 samples). Book gives more information on 3 series of dredgings (samples: Series I-20; Series II-13; Series III-3). Pp. 86-88: some water chemistry (<10 samples), pH, CO_2, O_2, bicarbonate, total acid, temperature of air and water (surface to approx. 40 feet), W.A.C., H.H.M., transparency, colour. Pp. 92-95: laboratory notes on drying of some benthic fauna. Final dry weight for given number of specimens. Approx. 11 species.

Keywords: Aquatic survey, water chemistry, depth, benthos, invertebrate, dry weights.

RECORD BOOK NO. 21
Harkness, W. J. K. 1926. Field diary and notes, May 14-December 31, 1926. 146p.
Location: Lake Nipissing; Lake Nipigon.
Duration: 8 months; part of larger study. See Record Book Nos. 43 and 44; most notes made May-July, 1926.
Description: Largely a general, non-systematic diary. Pp. 2-3: note 25 species of fish common to Lake Nipissing. Some air and water temperatures throughout. Lists of approx. 30 birds seen, approx. 25 plants and trees. P. 22: gill net haul of approx. 25 fish (pike, pickerel, perch, common sucker). Seine hauls of perch, trout perch, suckers, spottail minnows. Non-systematic description of "kinds" of whitefish of Nipissing. P. 64: 3 samples each of pike and whitefish (length, girth, weight). P. 98: net sizes listed (1 1/2"-5"); notes of plankton hauls, dredging. P. 127: map and soundings for narrows near Long Lac. P. 130: soundings, 4 settings, 5 samples each (probably Long Lac?). Pp. 134-5: approx. 30 seine hauls (numbers of fish and species). Pp. 136-7: gill net hauls, 4 locations (number, species, length). Loose page with water temperatures, Shakespeare Island Lake, surface to approx. 40 feet. <30 samples given.

Keywords: General ecological survey, fisheries, fish sampling, Lake Nipissing, Lake Nipigon.

RECORD BOOK NO. 22
Anonymous. 1927. Field data, perch stomachs, Bay of Quinte, 1927. Yellow perch samples taken by J. L. Hart, examined by W. J. K. Harkness and others.
Location: Bay of Quinte.
Duration: 3 days.

Table 4 continued on page 16.

Table 4. Chronological listing and annotation of record books (continued).

Description: Systematic study. Stomach contents of yellow perch taken in gill nets, November 1927. 87 samples (numbered 253-337). Identification, enumeration and percent composition of contents.

Keywords: Yellow perch, stomach contents.

RECORD BOOK NO. 23
Anonymous. 1927-28. Field records of brook trout stomach contents. Vol. I. 148p. (Presumed to be records of W. E. Ricker.)
Location: Various lakes, ponds and rivers in Ontario and Quebec.
Duration: 2 years.
Description: Stomach contents of brook trout (S. fontinalis). Length, sex of fish noted; presence of parasites. Identification, enumeration, percent composition, total volume of contents noted. 364 samples. See Record Book Nos. 26 (Vol. 2), 27, 45 and 46 (Vol. 3).
1. Mad River; Singhampton; Glen Major; Devil's Lake (north of Sault Ste. Marie); Sixteen Mile Creek (northwest of Milton); Lac Cassette (Quebec); Maitland River; Pine River (Dufferin Co.); Hornings Mill; *Little Wonder Pond (Hornings Mills); Pond 3; Glen Major; Strother's Lake. *Many from this location.

Keywords: Brook trout, parasites, gut contents.

RECORD BOOK NO. 24
Anonymous. 1927-28. Fish food, Lake Ontario, 1927-28. Field notebook. 30p.
Location: Port Credit (Lake Ontario).
Duration: 2 years.
Description: Stomach content analysis (enumerated) for the following species

Species	No. samples	Other measurements
Ling	120 approx.	Length, weight, liver weight, water depth
Pike	15 approx.	Length, weight, liver weight, water depth
Lake trout	300 approx.	Length
Perch	80 approx.	Only stomach contents given
A. rupestris (Rock bass)	1	Length
P. quadrilaterale (R. whitefish)	1	Length

Keywords: Fisheries, fish sampling, length, weight, fish diet, Lake Ontario.

RECORD BOOK NO. 25
Harkness, W. J. K. 1927-28. Record book and diary, January 1, 1927-July 16, 1928. 147p.
Location: Clear Lake; Little Clear Creek; Buck Lake.
Duration: 18 months.
Description: General diary, non-systematic. Incomplete soundings (approx. 3 per lake) of Clear Lake, Little Clear Lake, Buck Lake (gill nets had been set). Maps. 35 fish samples from Clear Lake (length, weight, girth, sex, mesh size taken in). Species taken: lake trout 9, sucker 15, cisco 2, speckled trout 7, ling 1. See RECORD BOOK NO. 29.

Keywords: Fisheries survey, gill net, length, weight.

RECORD BOOK NO. 26
Anonymous. 1928-30. Record book, stomach contents, Vol. 2. Field notebooks. 151p. (Presumed to be by W. E. Ricker.)
Location: Various (many from Horning's Mills). See list below.
Duration: November 3, 1928-May 18, 1930.
Description: Stomach content analysis (trout, sculpins, suckers) (#365-860) 505 samples noted; # enumeration and percent composition given. Fish length, weight, stomach volume, sex noted. Presence of parasites noted. See Record Book Nos. 23 (Vol. 1) and 46 (Vol. 3).

Table 4 continued on page 17.

Table 4. Chronological listing and annotation of record books (continued).

locations: Horning's Mills: Psephenus Pond, Huxtables Pond, Brudder Creek, F. Creek, E. Creek, Strother's Pond. Pine River (Terra Nova, Dufferin Co.); Credit River; Madawaska Creek (Algonquin Park); MacKenzie Falls; Eugenia Lake; Nottawasaga Falls; Vernon Lake (near Huntsville); Mulmur Lake; Sparks Creek (Bonfield, Ontario); Troutlet Creek (Bonfield, Ontario); Blackwater Creek (N.E. of Bonfield, Ontario); Mad River; Siloam Lake; Caledon Club, Pond 2.

Keywords: Fish survey, stomach contents, length, weight.

RECORD BOOK NO. 27
Ricker, W. E. 1928. Field records, collections, dredging. B. Series. 87p.
Location: Various ponds and creeks.
Duration: Summer 1928.
Description: List of approx. 500 vials and locations of sampling for benthic fauna (contents not described). Seven ponds/creeks sampled for benthic fauna. Samples >10 at each area. Fauna identified and enumerated. No details re: method, materials. Pencil drawings of ponds with stations marked on. List of mayflies recorded by Ide (1930) from B. Creek. See Record Book Nos. 23, 24, 25, 26, 45 and 46.

Locations sampled	No. stations (approx.)	No. samples (approx.)
Pond 1, Glen Major	6	30
Pond 2, Glen Major	9	40
Pond 3, Glen Major	7	30
Pond 4, Glen Major	2	4
Milmur Lake	10	10
Pond 1, Caledon Club	10	15
Little Wonder Pond	12	15
B. Creek, Horning's Mills	3	5

Keywords: Aquatic survey, ponds, creeks, benthos, insects.

RECORD BOOK NO. 28
Miller, G. W. 1928. Field record, alewife, 1928. 100p. (80p. numbered, loose notes and index cards.)
Location: Various (Port Credit, Rouge River...).
Duration: 3 months (May-July, 1928).
Description: Very incomplete, general notes. Length, sex, age of approx. 30 samples. Map of Toronto (1913). Approx. 20 index cards of unknown significance. Approx. 10 pages of rough calculations. Approx. 4 pages of length, sex, description (brief, mainly whether stomach full) of alewife samples (approx. 15 samples).

Keywords: Alewife, length, weight.

RECORD BOOK NO. 29
Spaulding, E. G. 1927-29. Field records fish study. 55p. See RECORD BOOK NO. 25.
Location: Lac Seul and others.
Duration: 2 years.
Description:
1927: Map, location of nets in Turtle Lake, Clear Lake, Little Clear Lake, Buck Lake. Notes on setting gill nets, general weather (not temperature), diary notes. Systematic recording of length, girth, sex, weight, age of some species taken in gill nets. Net size given. Fish assigned numbers. All from Clear Lake. Sample: whitefish (approx. 20); lake trout (approx. 25); suckers (approx. 50); ling (2). Age for suckers (15); trout (3); whitefish (15); length, girth, weight, sex, and assigned number of fish noted. Graph of age vs. length of fish. Food studies (identification, percent content, enumeration of stomach contents). Approx. 80 samples. Species: whitefish, suckers, speckled trout, ling.

Table 4 continued on page 18.

Table 4. Chronological listing and annotation of record books (continued).

1928: 3 days. All samples from Lac Seul. Fish measurements: length, girth, weight, sex, age, assigned number. Species and sample size: *pike (2); pickerel (20), whitefish (2), cisco (6), sucker (6). Graph of growth rate for pickerel: age vs. length for samples listed previously* (1929). Stomach contents (identification, enumeration, percent) for fish previously listed (see *). Food studies for <10 samples, Lac Seul.

Keywords: Fisheries survey, lake whitefish, speckled trout, ling, walleye, cisco, sucker, gut analysis.

RECORD BOOK NO. 30
Pentland, E. S. 1929. Field record, Frank's Bay, Lake Nipissing. 80p.
Location: Frank's Bay, Lake Nipissing.
Duration: 3 months (June-August, 1929).
Description: Air and water temperatures, June 13, September 11 (approx. 100 recordings). Six stations where depth, temperature, pH, O_2, acidity and alkalinity were recorded. Approx. 20 samples of cess/station for stations 1-4; 120 samples for stations; 40 samples station 6. Gill net record, approx. 8 hauls - counts of species only. Total approx. 1,500 fish taken: ling, cisco, whitefish, sucker, pickerel, rock bass. Trap net: 2 hauls - incomplete information. Seine hauls: 34, 22 species counted (see numbered pp. 84-85). Lists of plants, birds, fish of Frank's Bay and area.

Keywords: Fish, survey, limnology.

RECORD BOOK NO. 31
Anonymous. 1929. Gas mileage and meal accounts, 1929. 64p.
Location: Nipissing and various Ontario locations.
Duration: June 10-Sept. 12, 1929.
Description: Account book; gas, oil, provisions, meals.

Keywords: Field account book.

RECORD BOOK NO. 32
Oughton, J. 1929-34. Lake Nipissing benthos study 1929-34 (assigned title). 67p.
Location: Lake Nipissing.
Duration: 6 years.
Description: Original manuscript of dredging work. 190 dredgings and 'several' shore collections. Fluctuations in numbers, comparisons with numbers in Nipigon (Adamstone 1924), and Simcoe (Rawson 1930). See RECORD BOOK NO. 33.

Keywords: Benthos, manuscript.

RECORD BOOK NO. 33
Oughton, J. 1929-34(?). Lake Nipissing benthos study. 110p.
Location: Lake Nipissing.
Duration: 6 years.
Description: Rough data for manuscript (see RECORD BOOK NO. 32).

Keywords: Benthos, identification, distribution, Nipissing.

RECORD BOOK NO. 34
Ide, F. P. 1928. Insect collections in southern Ontario ponds and streams (assigned title). Field notes, Vol. 1. 149p.
Location: Horning's Mills; Glen Major; Little Wonder Pond; Schmittendorf Creek; Huxtables; Edna Creek; Mad River; Beaver River; Noisy River (Collingwood); Bruder Creek; Pine River.
Duration: June 3-August 18, 1928.

Table 4 continued on page 19.

Table 4. Chronological listing and annotation of record books (continued).

Description: Trip and field diary of insect collection and insect behavioral observations on various ponds, lakes and streams in southern Ontario. See Record Book Nos. 35, 36, 37 and 38.

Keywords: Aquatic survey, insect collection, insect emergence times, southern Ontario, trip diary.

RECORD BOOK NO. 35
Ide, F. P. 1928-29. Insect collections in southern Ontario ponds and streams (assigned title). Field notes, Vol. II. 145p. See Record Book Nos. 34, 36, 37 and 38.
Location: Caledon area; Credit River; French River; Bass Creek (near mouth of French River), Kingston, Belleville; Sand Island; Iron Island; Goose Island (Collingwood); Axtongue River; Cache Lake.
Duration: August 19, 1928-June 1930.
Description: Trip and field diary, personal notes, insect collection records, for various ponds, lakes and streams in south-central Ontario.

Keywords: Trip diary, aquatic survey, aquatic insect collection, southern Ontario, field diary, personal diary.

RECORD BOOK NO. 36
Ide, F. P. 1930. Field diary and notes on insect systematics and collecting in southern Ontario (assigned title). Field book, Vol. III. 142p. (Incomplete.) See Record Book Nos. 34, 35, 37 and 38.
Location: Mad River; Devil's Glen; Glen Huron; Brewsters Lake (Milltown); Badjeros (Muskoka); Creemore; Noisy River.
Duration: June 7-September 6, 1930.
Description: Very general trip and field diary, personal notes, and aquatic insect collection records for various ponds and streams in southern Ontario.

Keywords: Trip diary, field notes, insect collection, personal diary, southern Ontario.

RECORD BOOK NO. 37
Ide, F. P. 1931. Field diary and notes on insect collecting trips in southern Ontario (assigned title). Field book, Vol. IV. 43p. See Record Book Nos. 34, 35, 36 and 38.
Location: Horning's Mills; Singhampton; Glen Huron; Noisy River; Huxtables; Milltown.
Duration: May 20-August 19, 1931.
Description: Very general trip and field diary; personal notes and aquatic insect collection records for various ponds and streams in the Orangeville to Collingwood area of southern Ontario.

Keywords: Trip diary, field notes, insect collection, personal diary, southern Ontario.

RECORD BOOK NO. 38
Ide, F. P. 1934-39. Field diary and records on insect collecting in southern Ontario (assigned title). Field book, Vol. V. 77p. See Record Book Nos. 34, 35, 36 and 37.
Location: Ottawa River; Algonquin Park; Costello Creek; Credit River; Don River.
Duration: April 1, 1934-June 14, 1939.
Description: Trip and field diary; aquatic insect collection; notes on emergence; reference to lamprey in Don River (p. 5) 1937; some water temperature records at collection sites. Some sampling in Algonquin Park area (S. Canisbay Lake, Kingfisher Lake, Costello Creek, Found Lake); reference to smallmouth bass, M. dolomieu, in Found Lake (p. 22); records of temperature, oxygen, CO_2, pH and colour of Costello Creek on various dates during 1931, 1937 and 1938 (pp. 64-69).

Keywords: Trip diary, field notes, insect collection, insect emergence, southern Ontario.

RECORD BOOK NO. 39
Anonymous. 1929. Field record, physical record, Lake Nipissing, 1929. 128p.
Location: Lake Nipissing.

Table 4 continued on page 20.

Table 4. Chronological listing and annotation of record books (continued).

Duration: 5 months.
Description: Approx. 50 air temperature recordings (June-August). Map with sampling stations marked on. Approx. 50 water levels (bridge at Bass Creek [June-August]). Surface temperatures (June-August) in Frank's Bay (approx. 100). Water chemistry at 6 stations: temperature, O_2, pH, O_2 (% saturation), some carbonate titrations. June-September. Station 1 (approx. 6 readings); Station 2 (approx. 10), Station 3 (approx. 25), Station 4 (approx. 20), Station 5 (approx. 20), Station 6 (approx. 50). P. 95, O_2 (% and D.O.) at surface, daily August 8-September 2. Surface conditions noted. Pp. 110-128, general weather conditions (May 30-September 15). See RECORD BOOK NO. 48.

Keywords: Water chemistry, temperature, oxygen, pH, Nipissing.

RECORD BOOK NO. 40
Anonymous. 1929-31. Gill net record book. 148p. (Author possibly F. E. J. Fry.)
Location: Lake Nipissing.
Duration: June 9, 1929-Aug. 13, 1931. Summer months only.
Description: Gill netting records giving locations, depths and durations of sets; net descriptions; catches by mesh size; fish standard length in cm and in.; body weight in oz.; sex and, in many cases, stomach contents. Species include cisco, lake whitefish, yellow perch, pickerel (walleye), ling, sucker, pike, rock bass, smallmouth bass. Data is most extensive for cisco.

Keywords: Gill net survey, fish distribution, length, weight, Lake Nipissing.

RECORD BOOK NO. 41
Anonymous. 1929-31. Field record: trap nets, seine, angling, trolling, spearing, night lines, dynamiting, etc. Lake Nipissing. 144p.
Location: Lake Nipissing.
Duration: 3 summer field seasons.
Description: Series of general, incomplete information including everything listed in the title. Approx. 150 samples of bass: length, weight, sex. Other species collected: cisco, sucker, pickerel, perch, trout perch, stickleback, spottail minnow, smallmouth black bass, rock bass. See RECORD BOOK NO. 48.

Keywords: Fish survey, bass, length, weight, Lake Nipissing.

RECORD BOOK NO. 42
Fallis, A. M. 1929-30. Chemical laboratory notebook. 180p.
Location: Laboratory.
Duration: 2 years.
Description: Old lab. workbook. Listing of plants towards back. See RECORD BOOK NO. 48.

Keywords: Chemistry notes.

RECORD BOOK NO. 43
Harkness, W. J. K. 1929-30. Personal diary, 1929-30. 150p. (Authorship presumed, based on handwriting.)
Location: Some Campbell's Bay; Lake Nipissing.
Duration: 2 years.
Description: General, personal diary. Some entries may have been made at Lake Nipigon. Very general weather.

Keywords: Personal diary.

RECORD BOOK NO. 44
Anonymous. 1930. Field record, stomach contents. 6p.
Location: Nipissing (various).
Duration: 2 months (July-August).

Table 4 continued on page 21.

Table 4. Chronological listing and annotation of record books (continued).

Description: Stomach contents of (no. of samples): pickerel (14), smallmouth bass (20), pike (16), catfish (2), rock bass (6), ciscoes (2). Fish length, weight, sex noted; also, how caught.

Keywords: Fisheries survey, stomach contents, length, weight.

RECORD BOOK NO. 45
Anonymous. 1930. Field record, dredgings, H series, Mad River. 100p. (Authorship probably W. E. Ricker.)
Location: Mainly Mad River; Oxtongue River.
Duration: May-October, 1930.
Description: Map of Mad River (near Singhampton). Enumeration and identification of benthic fauna. Most samples (approx. 70) from Mad River, various stations (approx. 8). Approx. 12 samples from Oxtongue River. Notes on polycentropid. Drawings of various invertebrates. See Record Book No. 23.

Keywords: Fisheries survey, benthos, enumeration, identification.

RECORD BOOK NO. 46
Ricker, W. E. 1930. Field record, stomach contents, Vol. III. 149p. See Record Book Nos. 23 (Vol. I), 26 (Vol. II) and 27.
Location: Various. Most from Ontario (Singhampton area), but some from British Columbia, Quebec, east coast of Canada.
Duration: May-July, 1930.
Description: Sample size: 542 (No. 861-1403). Most taken 1930, <10 from previous years (1923, 1929, 1921). Approx. 20 locations, most in Ontario (Singhampton, many from Mad River). Species: suckers (<10), lake trout, speckled trout. Stomach content analysis: identification, enumeration, volume. Fish length, sex given; weight usually given, and stomach volume.

Keywords: Fish survey, stomach contents, length, weight.

RECORD BOOK NO. 47
Anonymous. 1930. Field record, physical record, 1930. 130p. (Authorship presumed to be J. M. B. Corkill.) See Record Book Nos. 48, 49 and 50.
Location: Lake Nipissing (10-15 locations).
Duration: May-September, 1930; part of longer work.
Description: See index, page 1. Air and water temperature, Frank's Bay (approx. 100 samples air; approx. 25 samples water). Water levels (one location) approx. 100 samples. Map of Lake Nipissing work stations (Frank's Bay, Campbell's Bay...). Water chemistry; depth, temperature, O_2, pH, % Sat'n O_2.

Sampling area	Approx. No. samples	Details
1	50	June-Sept.- water chemistry, as above
2	60	June-Aug. - hardness, CO_2, also calculated (p.43)
3	50	July - colour sometimes recorded
4	100	July-Aug. - (as 1)
5	25	Aug. - (as 1)
6	25	Aug. - (as 1)
7(V)	300	July - (as 1) wave action also noted

Also 3 series of sampling (approx. 50 each series), the series included 5-10 different sampling stations. Very general weather conditions. 4 loose pages - outline of summer work.

Keywords: Aquatic survey, limnology, temperature, oxygen, pH, hardness, Lake Nipissing.

Table 4 continued on page 22.

Table 4. Chronological listing and annotation of record books (continued).

RECORD BOOK NO. 48
Corkill, J. M. B. 1931. Field record, physical data, 1931. 149p. See Record Book Nos. 39, 41, 42 47, 49 and 50.
Location: Lake Nipigon (10-15 locations).
Duration: June-September, 1931; part of longer work.
Description: Air and water temperature recordings, Frank's Bay; barometric pressure; water levels (same Station as 1930). Water chemistry: depth, temperature, % Sat'n, pH, CO_2, H_2SO_4, hardness, colour. Approx. 10 stations or series. Approx. 2,000 samples. Light measurement (approx. 50 samples). General weather notes. Note in front that data submitted as Ph.D. thesis, U of T, 1935.

Keywords: Aquatic survey, limnology, temperature, oxygen, pH, hardness.

RECORD BOOK NO. 49
Corkill, J. M. B. 1932. Physical and chemical record, 1932. 148p. See Record Book Nos. 47, 48 and 50.
Location: Lake Nipissing.
Duration: May-October, 1932; part of longer work.
Description: Air temperature (approx. 125 samples); barometric pressure (approx. 125); water levels (one location approx. 50 recordings); relative humidity (for June, approx. 30). Water chemistry: depth, temperature, O_2, % saturation, pH, CO_2, HCO_3, hardness, colour. Approx. 6 stations, approx. 400 samples; one station was actually a series of approx. 50 readings from slightly different locations; one station recorded water chemistry (approx. 70 samples) from a cylinder containing myriafilum - details of method not given. Comparison of water sampling methods (syringe, rawson bottle, nansen bottle, kemmerer). (Pp. 53-57.) O_2 consumption by plankton (pp. 58-59) <10 samples. General weather notes. Note in front that data submitted as Ph.D. thesis, U of T, 1935.

Keywords: Aquatic survey, limnology, temperature, oxygen, pH, hardness, colour, Lake Nipissing.

RECORD BOOK NO. 50
Corkill, J. M. B. 1933. Record book, 1933. 16p. See Record Book Nos. 47, 48 and 49.
Location: Lake Nipissing (<4 locations).
Duration: May-September, 1933; part of longer work.
Description: Air temperatures (approx. 150); barometric pressure (approx. 130); water levels (approx. 70). Note at front that data submitted as part of Ph.D. thesis, 1935.

Keywords: Aquatic survey, limnology, Lake Nipissing.

RECORD BOOK NO. 51
Langford, R. 1930-32. Field diary of R. Langford. 150p.
Location: Lake Nipissing (and Prince Albert National Park, 1932).
Duration: June 1930-September 1932 (2 1/2 years).
Description: Personal diary, general notes. Work details: mention of water chemistry, dredging, seine and gill net hauls. Species mentioned: whitefish, minnow, stickleback, perch, ling, cottids, Iowa darter (may be others in text). Terrestrial insect collection listed in last 5 pages. Loose pages: rough draft of letter to W.J.K. Harkness - drawings of juday net; drawings of Cladoceran; drawing of plankton sampler; 4 dragon-fly wings.

Keywords: Field diary, work records, fisheries survey.

RECORD BOOK NO. 52
Anonymous. 1930-37. Record, High Hills Fish Pond. 45p. (Author presumed to be B. Ostler). See RECORD BOOK NO. 53 and 60.
Location: High Hills Fish Pond.
Duration: 7 years.

Table 4 continued on page 23.

Table 4. Chronological listing and annotation of record books (continued).

Description: Two loose pages: planting and catch records of rainbow and brook trout (incomplete, non-systematic). Fish length, how caught, general weather comments.

Keywords: Stocking, rainbow trout, brook trout.

RECORD BOOK NO. 53
Anonymous. 1931-37. Field record, stream, High Hills, fish record. 15p. (Author presumed to be B. Ostler.) See Record Book Nos. 52 and 60.
Location: High Hills Pond.
Duration: 7 years.
Description: Catch of rainbow and brook trout. Notes on fish length, how caught, general weather comments.

Keywords: Stocking, rainbow trout, brook trout.

RECORD BOOK NO. 54
Anonymous. 1929-32. Field record, stomach analysis, 1929-32. 148p. (Author presumed to be E. G. Skelton.) See RECORD BOOK NO. 55.
Location: Lake Nipissing (Campbell's Bay, Frank's Bay).
Duration: 3 years.
Description: Stomach contents analyzed. Fish assigned numbers; recording of length, weight, sex, stomach contents (identification, enumeration, volume). Species: pickerel (>500), perch (>100), pike (>50), ling (>50), whitefish (approx. 20), suckers (>500), rock bass (>20). Information condensed into tables, pp. 92-148

Keywords: Fish survey, stomach contents, length, weight, Lake Nipissing.

RECORD BOOK NO. 55
Skelton, E. G. 1932. Field record, stomach analysis, 1932. 141p. See RECORD BOOK NO. 54.
Location: Lake Nipissing (Frank's Bay, <10 others).
Duration: 1 year.
Description: Stomach contents analysed. Fish assigned numbers; recording of length, weight, sex, stomach contents (identification, enumeration, volume). Species: pickerel (approx. 400); perch (approx. 150); ling (approx. 10); whitefish (approx. 10); pike (approx. 20); rock bass (5); catfish (approx. 40); suckers (approx. 25); red horse (2). Data tabulated; weights of stomachs noted; net records (pp. 126-7, and 136-7); seasonal variation in stomach contents.

Keywords: Fish survey, stomach contents, length, weight, Lake Nipissing.

RECORD BOOK NO. 56
Skelton, E. G. 1929-32(?). Feeding experiments. 9p.
Location: Lake Nipissing; Campbell's Bay; Sand Creek.
Duration: 1 month (August).
Description: Experiment begun on feeding. Fish caught in seine and trap nets, put in cages. Experiment abandoned due to high mortality of captured fish. Species: pike, black bass, catfish, rock bass, sunfish, pickerel, perch.

Keywords: Feeding experiment.

RECORD BOOK NO. 57
Skelton, E. G. 1928-33. Record: rate of growth studies. 146p.
Location: Lake Nipissing (approx. 20 locations).
Duration: 5 years.

Table 4 continued on page 24.

Table 4. Chronological listing and annotation of record books (continued).

Description: Morphological measurements for pickerel and perch. Fish assigned numbers, net size given, age, sex, length, weight, depth, date hatched, location caught. 1929: pickerel (approx. 180 samples); 1930: pickerel (approx. 200 samples); 1931: pickerel (approx. 300 samples); 1932: pickerel (approx. 500 samples), pike (approx. 50 samples), perch (approx. 350 samples); 1933: pickerel (approx. 300 samples). Miscellaneous notes and measurements, some on scale studies, incomplete data.

Keywords: Fisheries survey, morphology, length, weight, age, Nipissing.

RECORD BOOK NO. 58
Anonymous. 1933. Gill net record book. 80p. (Author possibly F. E. J. Fry.)
Location: Lake Nipissing.
Duration: July 21, 1933-November 7, 1933.
Description: Gill netting records giving locations, depths, and duration of sets, net catches by mesh size for various species, fish standard length, weight, sex and, in some cases, stomach contents. Species as indicated in RECORD BOOK NO. 40. Data is most extensive for cisco.

Keywords: Fish sampling, gill net, weght, sex, mesh size, depth.

RECORD BOOK NO. 59
Anonymous. 1934. Record, accounts. 125p. (Author presumed to be W. J. K. Harkness.)
Location: Ontario.
Duration: April 5, 1934-March 5, 1935.
Description: Account book kept by W.J.K. Harkness for field expenses by various University of Toronto biological workers.

Keywords: Accounts, food, gasoline, travel.

RECORD BOOK NO. 60
Ostler, B. 1934-37. Record, Fish Pond, High Hills. 25p. See Record Book Nos. 52 and 53.
Location: "Fish Farm", High Hills.
Duration: 4 years.
Description: Notes on building "Fish Farm" (1934-5). Rainbow and speckled trout planted; notes of fish caught. Notes on size (length or weight), bait/fly used, general weather comments. Approx. 200 samples.

Keywords: Fish farm, construction, rainbow trout, speckled trout.

RECORD BOOK NO. 61
Anonymous. 1935. Personal diary, 1935. 31p. (Author presumed to be W.J.K. Harkness.)
Location: Toronto.
Duration: October 16, 1935-January 6, 1936.
Description: Personal diary, general weather notes. Newspaper clippings.

Keywords: Personal diary.

RECORD BOOK NO. 62
Anonymous. 1935. Field record, Lake Nipissing, 1935. 167p. (Author possibly F. E. J. Fry.)
Location: Lake Nipissing.
Duration: June-September 1935.
Dedcription: Notes, measurements of fish (approx. 3,000 samples). Species include cisco, pike, pickerel, ling, whitefish. Fish assigned numbers. Length, sex, depth and net mesh usually given.

Keywords: Fish survey, length, weight, sex, depth, gill net survey, Lake Nipissing.

Table 4 continued on page 25.

Table 4. Chronological listing and annotation of record books (continued).

RECORD BOOK NO. 63
Dymond, J. R. 1935. Algonquin Park fish. 50p.
Location: Algonquin Park (approx. 15 lakes).
Duration: July-August 1935.
Description: Fish caught, length, some stomach contents. Gill net records: Cache and Hilliard Lakes. Equipment noted (mesh size) and depth of nets given. 5 hauls. Species: lake trout (6), northern suckers (15). Seining (pp. 15-20): Lakes Head, Joe, Hilliard, Cachel, Opeongo, Butt, Canoe, Hickeys, Magnetawan, Camisbay Creek and Madawaska River. Species: Notropis cornutus (common shiner), approx. 400; Chrosomus erythrogaster (northern red belly dace), 260; Eucalia inconstans (brook stickleback), 100; Semotilus atromaculatus (creek chub), 90; Hybornynchus notatus (bluntnose minnow), approx. 35; Catastomus commersonii (white sucker), 29; Pimephales promelas (fathead minnow), 30; Notropis heterolepis (blacknose shiner), 20; Eupomotis gibbosus (pumpkinseed), 30; Perca flavescens (yellow perch), 50; perch (?), 15; bass (?), 15; c. sucker, 20; catfish, 1; Couesius plumbeus (lake chub), 1; Micropterus dolomieui (smallmouth bass), 1. Lengths recorded. P. 51: sunfish (3) (Cache L.); length, weight, how caught. P. 75: smallmouth black bass (approx. 180) (mostly Cache L. and Madawaska R. below Cache L. dam); numbered, length, weight, remarks (food - some stomach contents preserved), how caught. P. 97: northern sucker (12) (Cache L.); length, weight, sex, how caught. P. 101: lake trout (approx. 30) (mostly Cache L.); length, weight, sex, food, how caught. P. 124: visitors list.

Keywords: Fisheries survey, Algonquin lakes, gill net, length-weight data, stomach contents.

RECORD BOOK NO. 64
Fry, F. E. J. 1936. Creel census information. 20p.
Location: Algonquin Park.
Duration: Summer, 1936.
Description: Names, dates and addresses.

Keywords: Creel census methods.

RECORD BOOK NO. 65
Anonymous. 1936. Supplementary information on angling. 45p.
Location: Mostly Lake Opeongo; some Redrock, White Gull, Wrights Lakes.
Duration: May-September, 1936.
Description: Notes on fish present, parties fishing. Lake Opeongo species: bass herring, suckers, perch, sunfish, minnows. Stomach contents: lake trout, >100; bass, approx. 60. P. 22: note that lake trout caught in both shallow and deep water. Redrock Lake: lake trout stomachs. Gull Lake: approx. 10 lake trout stomachs, length, surface temperature. Wrights Lake: stomach contents of 6 smallmouth bass.

Keywords: Algonquin Park lakes, fisheries survey, lake trout, bass, stomach contents, fish length.

RECORD BOOK NO. 66
Anonymous. 1936-37. Algonquin Provincial Park net records, 1936. 120p.
Location: Lake Opeongo; also Redrock, Kinesis, Costello, Brewer, White Gull, Cache, Proulx, Mary, Sproule, Sunday, Little McCauley, Whitefish, Birch Lakes.
Duration: June-October, 1936; summer 1937.
Description:
Opeongo: Length, weight, head length, anal height, scales, notes (diet, sex) noted for fish; net size, location, depth given. Species: catfish (approx. 20), whitefish (approx. 20), northern sucker (approx. 7), common sucker (>100), lake trout (approx. 60), ling (approx. 40), smallmouth bass (approx. 25), eel (2), perch (approx. 80), Eupomotis (pumpkinseed) (approx. 15), Prosopium (round whitefish) (approx. 15).
Redrock: Information as for Opeongo (other lakes, same info.). Species: lake trout (aapprox. 50), speckled trout (3), Prosopium (round whitefish?) (approx. 20), common sucker (approx. 10).
Kinesis: Sampled only 3 days in August. Species: lake trout (approx. 10), northern sucker (approx. 10).

Table 4 continued on page 26.

Table 4. Chronological listing and annotation of record books (continued).

Costello: Species: ling (10), lake trout (approx. 15), common sucker (approx. 10), Eupomotis (pumpkinseed) (<10), perch (<10).
Brewer: Sampled in 1936 and 1937. Species: lake trout (approx. 50), perch (approx. 10), common sucker (approx. 10). 1937 entry refers to cards (not included) - species mentioned: brown trout, lake trout (some lengths), catfish, perch. Notes on fish planted, 1937.
White Gull: Species: common sucker (approx. 40), perch (approx. 5), speckled trout (<10), sunfish (1), Semotilus (<10).
Proulx: (1937) Species: cisco (approx. 70), common sucker (approx. 5), whitefish (approx. 5), speckled trout (2), lake trout (10).
Cache: Species mentioned (all <10): brown trout, lake trout, speckled trout, perch, commons sucker.
Mary: (1937) Species: cisco (>100), whitefish (approx. 40), perch (approx. 15), smallmouth bass (<10), minnows (<10), common sucker (15), northern sucker (2), lake trout (2), sunfish (1).
Other lakes sampled (<10 fish/species sampled): Sproule, Sunday, McCauley, Whitefish, Birch Lakes.

Keywords: Fish survey, Algonquin lakes, gill net, fish morphology.

RECORD BOOK NO. 67
Doan, K. H. 1936. Field diary and general notes on smallmouth bass (assigned title). 197p. (but pages only partially utilized). See RECORD BOOK NO. 68.
Location: Mitchell's Bay.
Duration: May-June 1926.
Description: Pp. 1-10: diary and general notes on bass. Pp. 122-147: 11 bass nests observed; notes on whether successful, when nests found, when young rose, last guarding data, other observations on behaviour. Pp. 149-151: approx. 20 readings of air and water temperatures. Expenses, miscellaneous notes, general weather notes. Two loose pages: 1 letter, 1 newspaper clipping (pickerel).

Keywords: Smallmouth bass, behavior, spawning, reproduction, hatching.

RECORD BOOK NO. 68
Doan, K. H. 1936. Field diary, smallmouth bass studies (assigned title). 186p. (pages only partially utilized; only 40p. contain notations).
Location: Point Baril (Georgian Bay, north of Parry Sound).
Duration: June-July, 1936.
Description: 1-8 general notes, observations on bass nests. Pp. 40-47: approx. 175 samples of black bass (main species), pickerel, pike, rock bass. Length, weight, sex, stomach contents noted. Pp. 56-59: approx. 20 measurements of bass nests - distance from shore, dimensions of nest depression, shape, type of bottom, maximum depth, height of rim, approx. area of bottom, approx. area of depression, depth to normal bottom. Pp. 63-86: observations of nests. Four loose pages of rough work. Three black and white photographs of the study site. See RECORD BOOK NO. 67.

Keywords: Smallmouth bass, nesting, spawning behavior, length, weight, stomach contents.

RECORD BOOK NO. 69
Anonymous. 1937. Field notes and diary, 1937. 182p. (Author presumed to be W. J. K. Harkness.)
Location: Opeongo, Costello, Cache lakes.
Duration: April-October, 1937.
Description: Personal diary, general weather observations, work notes.

Keywords: Diary, personal, work notes.

RECORD BOOK NO. 70
Harkness, W. J. K. 1937-38. Field notes and diary, 1937-38 (assigned title). 200p.
Location: Toronto (mainly); Algonquin Park.
Duration: 1 year (October 30, 1937-October 7, 1938).

Table 4 continued on page 27.

Table 4. Chronological listing and annotation of record books (continued).

Description: Personal diary and notes, very general. Notes in Algonquin Park at Costello Lab.; general weather notes. One loose page: letter to Harkness from Fallis. Newspaper clippings of Grey Owl/fishing. P. 152: typed list of stomach contents of two specimens of C. namaycush (L. Opeongo, 1938 - identified by F.P. Ide). Contents identified (approx. 11 sp.) and enumerated (approx. 200).

Keywords: Field notes, personal diary, lake trout, stomach analysis.

RECORD BOOK NO. 71
Doan, K. H. 1937. Field records, Cache Lake. 200p.
Location: Cache Lake.
Duration: 1 field season.
Description: Bass measurements (approx. 75) length, weight, sex, stomach contents. Three spawn counts. Trout measurements (approx. 60); northern sucker (C. catostomus) (approx. 55) plus egg counts; white sucker (C. commersonii) (24); perch (approx. 5). Sunfish nests (3). Notes on net setting. Bass spawning: behavioural notes. Fish planting. Angling record (lake trout, bass). P. 101: personal diary. Four dredging samples. Five loose pages: field notes.

Keywords: Fish survey, smallmouth bass, length, weight, sex, stomach contents.

RECORD BOOK NO. 72
Anonymous. 1937. Algonquin Park fish survey (assigned title). 200p.
Location: Costello, Brewer, Little McCauley, Eos, Whitefish Lakes.
Duration: May-September, 1937.
Description: Minnow diet. Trap and seine haul records (mostly perch, sunfish). General weather notes. Habitat notes at different stations in lakes (30+ stations). Other fish spp. mentioned (p. 4): N. cornutus (common shiner), S. atromaculatus (creek chub), C. eos (western redbelly dace), P. flavescens (yellow perch), E. gibbosus (pumpkinseed), N. crysoleucas (golden shiner), C. commersonii (white sucker), N. heterolepis (blacknose shiner), A. nebulosus (catfish), H. hankinsoni (brassy minnow), M. margarita (pearl dace), Leucosomus (?), P. neogaeus (finescale dace), N. atherinoides (emerald shiner), H. notatus (bluntnose minnow), S. fontinalis (brook trout), ling, C. namaycush (lake trout), P. quadrilaterale (round whitefish), C. catostomus (northern sucker). Six loose pages (maps): 2 of Costello, 1 each of Cache, Eos, Whitefish; 1 with both Little McCauley and Brewer.

Keywords: Fish survey, fish distribution, trap net, seine, cyprinids.

RECORD BOOK NO. 73
Anonymous. 1937. Field record, Mercury Lake, 1937 (assigned title). 13p.
Location: Various; approx. 10 stations on river (stream ?) from south of King City north to Nobleton.
Duration: June-August, 1937.
Description: Maps of river/stream, approx. 10 station. Nancy Lake also sampled. Total samples given, approx. 20. General, non-systematic survey of temperature, vegetation, bottom, invertebrates and fish. Species: (not counted or measured) creek chub, creek shiner, dace, sucker, darters, sculpin.

Keywords: Aquatic survey, fish, invertebrates, stream.

RECORD BOOK NO. 74
Anonymous. 1938-40. Field records, diary 1938-40, aquatic survey (assigned title). 101p. (pages only partially utilized). (Author presumed to be W. J. K. Harkness, based on handwriting.)
Location: Various; Toronto and others (not known); Lake Kingsley.
Duration: October 1938-April 1940.

Table 4 continued on page 28.

Table 4. Chronological listing and annotation of record books (continued).

Description: General diary in beginning. Rough field notes, location not known, later in book. Some water chemistry (CO_2, pH, O_2, Secchi Disc), temperatures. Locations uncertain; <60 samples of water chemistry; >100 samples of water temperature. Approx. 20 pages rough field notes (temperatures, water chemistry, incomplete). Newspaper articles.

Keywords: General aquatic survey, water chemistry, pH, oxygen, temperature, secchi disc.

RECORD BOOK NO. 75
Tidy, W. 1938-39. High Lake, Mona Centre. 20p. + 8 loose leaf pages.
Location: High Lake.
Duration: 2 years.
Description: 8 loose pages: 4 pp. food of speckled trout (approx. 30 fish). Food organisms identified, enumerated; volume calculated. All from High Lake 1938-39 (May-October, 2 years). Four pages food of rainbow trout (approx. 30 fish) - food organisms treated as above (May-October 1938). Tabulation of loose pages (?) - same numbers of specimens, same locations and dates as above (loose pages) - plus one brown trout.

Keywords: Speckled trout, rainbow trout, stomach contents.

RECORD BOOK NO. 76
Langford, R. R., and W. A. Kennedy. Algonquin Park, soundings, 1936-41. 103p.
Location: See below.
Duration: 1936-41.
Description: Depth soundings for the following lakes (maps included): Cache, Redrock, White Gull, Big Trout, Pinetree, Clarke, Lake of Two Rivers, Brewer, Proulx, South Tea, Norway, Kearney, Costello, Little McCauley, White, Found, Fork, Travers.

Keywords: Soundings, Algonquin Park lakes.

RECORD BOOK NO. 77
Kennedy, W. A. 1938-40. Field diary and notes, Algonquin Park 1938-40 (assigned title.). 100p.
Location: Proulx Lake; Lake Opeongo (Sproule Bay).
Duration: 1938-40.
Description: Approx. 50 p.
Proulx Lake (Nov. 1939): general diary, work notes. Species sampled: suckers (approx. 20), lake trout (<10), speckled trout (<10), whitefish (<10), cisco (<10). Scale reading: Jan. 1940 (approx. 100).
Sproule Bay: Field notes, equipment, some water temperature, (0.7 m). Species sampled: ling (>30), lake trout (>50), common sucker (>100), perch (>50), sunfish (>20), common whitefish (>100), catfish (>30), northern sucker (>10), bass (>10), Prosopium (round whitefish) (>30).

Keywords: General field notes, fish sampling, Algonquin Park.

RECORD BOOK NO. 78
Kennedy, W. A. 1939. Perch records. 184p.
Location: Lake Opeongo; Whitetrout Lake; some Lake Erie.
Duration: April-October (?) 1939.
Description: Pp. 2-7: field notes, Lake Erie. Approx. 37 perch. Weight, sex, stomach, head, eye, depth, pectoral fin, maxillary, scales, all noted. Pp. 10-33: Lake Opeongo. Approx. 80 perch. Information as above plus number assigned. P. 35-184: Whitetrout Lake. Personal diary, work notes, general weather, description of equipment (types of nets). Many fish clipped/tagged. Species include ling (>100), common sucker (>100), perch (>100), whitefish (>100), Margarita?, (approx. 40), lake trout (>100), catfish (approx. 50). Length, sex usually noted.

Keywords: Fish survey, yellow perch, morphology, sampling methods, fish species listing.

Table 4 continued on page 29.

Table 4. Chronological listing and annotation of record books (continued).

RECORD BOOK NO. 79
Harkness, W. J. K. 1939. Field notes and diary, January 1939-August 1939. 200p. (Authorship presumed, based on handwriting.)
Location: Toronto; Vineland.
Duration: January-August 1939.
Description: Personal diary, very general weather, newspaper articles.

Keywords: Diary, personal.

RECORD BOOK NO. 80
Kennedy, W. A. 1940. Fire rangers daily report book. 30p.
Location: Many lakes (Algonquin Park).
Duration: June 1940.
Description: General work notes, nets set/hauled, fish planting.

Keywords: Fish survey, field notes.

RECORD BOOK NO. 81
Kennedy, W. A. 1940. Fire rangers daily report book. 31p.
Location: Many lakes (Algonquin Park).
Duration: August 1940(?).
Description: General work notes, nets set/hauled, weather (general).

Keywords: fish survey, field notes.

RECORD BOOK NO. 82
Anonymous. 1941-43. Field records, sturgeon morphology, Quebec and Lake Erie. 150p. (not completed). (Author presumed to be W. J. K. Harkness.)
Location: Quebec (Lac St. Louis, Montreal); Lake Erie.
Duration: June 1941-August 1943.
Description: Sturgeon measurements, most from Quebec (100-150), 1941-1942. Approx. 10 from Lake Erie, 1943 (taken by K.H. Doan, see p. 159). Data tabulated for approx. 100 specimens, very detailed measures: length, head (to back of cartilage, to back of flap), eye, tip of snout to eye, interorbital width, tip of snout to front of mouth, barbel (greatest length), distance mouth extended, pectoral fin (rays, height, base), gill rakers (first gill arch - front (No.), back (No.), length. Date captured, place captured, weight, weight of head, total length of head as preserved, sex, width at opercles, age by otoliths, head depth, date examined, otolith measurements, remarks.

Keywords: Sturgeon, morphometry, age, otoliths.

RECORD BOOK NO. 83
Long, J. A. 1944. Fisheries and limnological survey of Lake Opeongo and Brewer Lake, 1944 (assigned title). 30p.
Location: Lake Opeongo, Brewer Lake.
Duration: May-August 1944.
Description: General work/weather notes. Fish planting (lake trout).
Opeongo: 3 stomach samples. Weight/length of lake trout caught (<10). Notes on spawning time of smallmouth bass (July 8). Water temperature (5 series), and O_2 content (surface and bottom) in Lake Opeongo (Deep Hole, off Windy Point). Depths (temp.) 0-35 (40) yds. Epilimnion, hypolimnion and thermocline determination - graphs, maps.
Brewer: Notes on nets set. Species caught: perch (approx. 30), lake trout (approx. 10), speckled trout (approx. 5), sucker (approx. 5), brown trout (1), catfish (1). Water temperature (0-15/yds (bottom)), O_2 content (surface and bottom), determination of depth of epilimnion, hypolimnion, thermocline, graph, map.

Keywords: Fish survey, gill net, temperature, oxygen.

Table 4 continued on page 30.

Table 4. Chronological listing and annotation of record books (continued).

RECORD BOOK NO. 84
Martin, N. D. 1944. Daily report and creel census, north Algonquin Park. 60p.
Location: N. Algonquin Park (see list below).
Duration: June-September 1944.
Description: Creel census notes. Summaries. Lakes: N. Tea, Kiosk, Government Park and Daventry, Brent, Radiant, Traverse, Achray, Dahlia.

Keywords: Creel census, Algonquin Park.

RECORD BOOK NO. 85
Skinner, J. 1937-44. General information about the lakes, fishes and recreational use of Quetico area (assigned title). 60p. (Authorship uncertain.)
Location: Quetico area.
Duration: 1937-44.
Description: General information about the park: accessibility, tourist camps, supply depots, insects, birds and mammals, rangers (etc.) in Park, fish (very incomplete, only 6 spp.). Atikokan and Steep Rock: drainage for mine, fish in Steep Rock area (pounds of fish shipped by Atikokan Fish Co. to spring 1944). Brief notes on walleye, pike, muskellunge, bass, suckers, ling, perch, whitefish, cisco. Brief notes on Eva, Saynewga, Basswood Lakes. Numbers of tourists 1937-43. Brief geological history. Brief historical notes on fishing. Wildlife in park.

Keywords: General survey, fish, birds, mammals, park.

RECORD BOOK NO. 86
McGeow, B. 1944-45. Ontario Fisheries Research Laboratory: Creel census, Algonquin Park north. 199p. (only 40 pages utilized).
Location: Many locations, Algonquin Park north (see list below).
Duration: Spring and summer 1944, 1945.
Description: Creel census of various lakes and rivers. Rivers and lakes include Petawawa R., Cedar L., Little Nipissing R., Gauthier L., Cauchon L., Rainbow L., Amable du Fond R., Wolf L., Kioshquother (?) L., Trout L., Radiant L., Barrow L., McSorely L., Waubum L., Green L., Meed L., Lynx L., Cuckoo L., Bug L. Notes on fishing parties included number of anglers, fish caught (approx. size), time fishing, method of fishing (e.g. trolling). Species caught included ling, bass, catfish, eel, herring, rock bass, pickerel, whitefish, speckled trout, grey trout, lake trout. Pp. 100-106: approx. 20 stomach contents (June 20-July 30). Two rough maps at back (lakes unknown).

Keywords: Creel census, Algonquin Park, stomach contents, fish.

RECORD BOOK NO. 87
Harkness, W. J. K. 1946. Field notes and diary. 21p.
Location: Various (Vineland, Toronto).
Duration: May 1-June 18, 1946.
Description: Personal diary, general, no work details.

Keywords: Personal diary, general.

RECORD BOOK NO. 88
Anonymous. 1946. Fisheries survey, Sibley Park, Lake Superior, 1946 (assigned title). 34p. + 2 loose leaf.
Location: Sibley Park, Lake Superior.
Duration: June 28-July 25, 1946.
Description: Gill net survey of lakes in Sibley Park area of Lake Superior. Gill net set locations shown and catches recorded. Some water temperatures and general shoreline mapping. Lake Marie Louise, Sibley Creek, Sawbill Lake. Species: cyprinids, ninespine stickleback, northern pike, suckers, perch, sculpin. Mayfly hatch noted.

Keywords: Fish survey, gill net, limnology, temperature.

Table 4 continued on page 31.

Table 4. Chronological listing and annotation of record books (continued).

RECORD BOOK NO. 89
Baldwin, N. S., and N. D. Martin. 1947. Redrock Lake, 1947. 73p.
Location: Redrock Lake; some Nepawin Lake.
Duration: May-September, 1947.
Description: Water temperature readings (approx. 12 series) from surface to approx. 60'. Oxygen content determinations (surface, some intermediate depths and bottom). Map of 7 netting positions in Redrock Lake. Sampling of fish (May-September). Species: perch (>100), lake trout (>60), speckled trout (>80), suckers (>100), C. cornutus (common shiner) (>60), Prosopium (round whitefish) (>100), bullheads (2). Soundings of Nepawin Lake - map with sounding lines.

Keywords: Fish survey, gill net, water temperature, Redrock Lake.

RECORD BOOK NO. 90
Martin, N. V. 1947. Louisa Lake, 1947. 70p.
Location: Louisa Lake (Algonquin Park).
Duration: July-August, 1947.
Description: Soundings (approx. 86 series). Fish collected from nets. Species: H. notatus (bluntnose minnow) (>100), N. cornutus (common shiner) (>100), sunfish (approx. 70), S. atromaculatus (creek chub) (approx. 100), C. eos (northern redbelly dace) (>100), C. catastomus (northern sucker) (>100), C. commersonii (white sucker) (approx. 30), lake trout (>100), speckled trout (approx. 15), L. gibbosus (pumpkinseed) (approx. 30), lake chub (80). Some lake trout lengths given. Scales taken from some fish.

Keywords: Soundings, fish survey.

RECORD BOOK NO. 91
Baldwin, N. S., and N. V. Martin. 1947-48. Creel census, proposed projects. 40p.
Location: Algonquin Park: Red Rock Lake, Proulx Lake, Clarke Creek, Orono Creek project, Sibley Park.
Duration: 1947-48.
Description: Creel census for Algonquin Park lakes. Planning notes for work to be done. Fish planting (lake trout, speckled trout, bass). Many temperatures (surface-bottom), O_2 concentrations (2 series). Net hauls (net size given). Fish length not always noted. Species: perch (>100), N. cornutus (common shiner) (approx. 30), sucker (approx. 10), round whitefish (approx. 10), speckled trout (approx. 5), lake trout (approx. 10).

Keywords: Fish survey, Algonquin Park lakes.

RECORD BOOK NO. 92
Baldwin, N. S. 1948. Wilmot Creek, 1948. 48p.
Location: Wilmot Creek (upstream and downstream stations; not specific; no maps).
Duration: May-September, 1948.
Description: Maximum and minimum temperatures. No indication as to methodology/equipment used for capture of fish. Species listed: longnosed dace, Millers' thumb, rainbow darter, northern creek chub, blacknose dace, johnny darter, Catostomus catostomus, C. commersoni, rockbass, northern redbelly dace, sea lamprey, brown trout, speckled trout, northern log perch, sunfish, black bass, eel, salmon. Approx. 200 samples taken.

Keywords: Fish survey, stream survey.

RECORD BOOK NO. 93
Anonymous. Date unknown. Distribution of muskellunge in Ontario (assigned title.) 6p.
Location: Various (see description).
Duration: Unknown.
Description: Occurence of muskellunge in various waters. Locations: St. Lawrence River, Bay of Quinte, Ottawa River, Rideau Canal, Trent Valley Canal system, Georgian Bay, Lake Nipissing system, Great Lakes.

Keywords: Muskellunge, Ontario.

Table 5. Listing of Ontario Fisheries Research Laboratory field record books[a] held by the Royal Ontario Museum and the Department of Zoology, University of Toronto.

Year	Location	Author	Contents
I. Archives Royal Ontario Museum			
1921	Lake Nipigon	J.R. Dymond	Fish, reptile collections
1921	Lake Nipigon	J.R. Dymond	Fish measurements
1922	Lake Nipigon area	J.R. Dymond	Fisheries survey
1922	Lake Nipigon	J.R. Dymond	Diary, net records
1923-4	Lake Nipigon	J.R. Dymond	Diary, net records
1925	Lake Nipissing	J.R. Dymond	Diary, fish collections
1926	British Columbia	J.R. Dymond	Diary, fishing records
1927	Lake Ontario	J.R. Dymond	Seine and gill net records
1928	British Columbia	J.R. Dymond	Diary, net records
1929	Ontario, various locations	J.R. Dymond	Diary, net records
1930-2	Lake Nipissing	J.R. Dymond	Diary, fish collections
1933-4	Lake Nipissing	J.R. Dymond	Diary, netting records
1937	King Township	J.R. Dymond	Fishing records
1925-8	British Columbia, several Ontario, New Brunswick, other Canadian locations	J.R. Dymond	Fish collection records, also A.L. Pritchard, D.S. Rawson, A. Needler, W.E. Ricker, J.R. Dymond and W. Clemens
1931	Lake Nipissing, Moose River, Trout Lake, Blue Lake	F.E.J. Fry	Net records
1931	Lake Nipissing, Lake Ontario	F.E.J. Fry	Fish measurements
1933	Lake Nipissing	F.E.J. Fry	Fish measurements
1934	Lake Nipissing	F.E.J. Fry	Net record
1931-4	Lake Nipissing	F.E.J. Fry	Diary
1932	Lake Nipissing	F.E.J. Fry	Fish measurements
1936	Algonquin Park	W.A. Kennedy	Field diary. fish survey,
unknown	unknown	R.B. Miller	seining records

Table 5 continued on page 33.

[a]List provided by T. Whillam, Institute of Environmental Studies, University of Toronto.

Table 5. Listing of Ontario Fisheries Research Laboratory field record books held by the Royal Ontario Museum and the Department of Zoology, University of Toronto[a] (continued).

Year	Location	Author	Contents
II. Department of Zoology, University of Toronto:			
1921	Lake Nipigon	N.K. Bigelow	Field records, zooplankton
1922	Lake Nipigon	N.K. Bigelow	Field records, zooplankton
1923	Lake Nipigon	N.K. Bigelow	Field records, zooplankton
1925-8	Lake Abitibi, Lake Nipigon, Shakespeare Island, Lake, Long Lac, Lake Ontario	W.J.K. Harkness	Field records, fish sampling, gill net records.
1928	Southern Ontario streams	W.E. Ricker	Field notes, aquatic survey
1933	Lake Nipissing	J.M.B. Corkill	Limnology field records
1934	Lake Nipissing	J.M.B. Corkill	Weather data
1934	Lake Nipissing	J.M.B. Corkill	Diary, limnology field records
1934	Lake Nipissing	J.M.B. Corkill	Plankton records
1934	Lake Nipissing	J.M.B. Corkill	Oxygen consumption records

[a]List provided by T. Whillans, Institute of Environmental Studies, University of Toronto.

APPENDIX

Table A-1. Listing of the publications of the Ontario Fisheries Research Laboratory 1922-1956.

OFRL No.	Citation
1.	Bensley, B. A. 1922. A plan for the biological investigation of the water areas of Ontario. Univ. Toronto Studies, Biol. Series 20:1-23.
2.	Clemens, W. A. 1922. A study of the ciscoes of Lake Erie. Univ. Toronto Studies, Biol. Series 20:26-37.
3.	Clemens, W. A., and N. K. Bigelow. 1922. The food of ciscoes (Leucichthys) in Lake Erie. Univ. Toronto Studies, Biol. Series 20:39-53.
4.	Dymond, J. R. 1922. A provisional list of the fishes of Lake Erie. Univ. Toronto Studies, Biol. Series 20:55-73.
5.	Adamstone, F. B. 1922. Rates of growth of the blue and yellow pike perch. Univ. Toronto Studies, Biol. Series 20:75-86.
6.	Harkness, W. J. K. 1922. The rate of growth of the yellow perch (Perca flavescens) in Lake Erie. Univ. Toronto Studies, Biol. Series 20:87-95.
7.	Couch, J. H. 1922. The rate of growth of the white fish (Coregonus albus) in Lake Erie. Univ. Toronto Studies, Biol. Series 20:97-107.
8.	Bigelow, N. K. 1922. Representative Cladocera of southwestern Ontario. Univ. Toronto Studies, Biol. Series 20:109-125.
9.	Coventry, A. F. 1922. Breeding habits of the land-locked sea lamprey. Univ. Toronto Studies, Biol. Series 20:127-137.
10.	Coleman, A. P. 1922. Glacial and post-glacial lakes in Ontario. Univ. Toronto Studies, Biol. Series 21:1-76.
11.	Clemens, W. A. 1923. The limnology of Lake Nipigon. Univ. Toronto Studies, Biol. Series 22:1-31.
12.	Dymond, J. R. 1923. A provisional list of the fishes of Lake Nipigon. Univ. Toronto Studies, Biol. Series 22:33-38.
13.	Bigelow, N. K. 1923. The plankton of Lake Nipigon and environs. Univ. Toronto Studies, Biol. Series 22:39-66.
14.	Adamstone, F. B. 1923. The distribution and economic importance of mullusca in Lake Nipigon. Univ. Toronto Studies, Biol. Series 22:67-119.
15.	Adamstone, F. B., and W. J. K. Harkness. 1923. The bottom organisms of Lake Nipigon. Univ. Toronto Studies, Biol. Series 22:121-170.
16.	Clemens, W. A., J. R. Dymond, N. K. Bigelow, F. B. Adamstone, and W. J. K. Harkness. 1923. The food of Lake Nipigon fishes. Univ. Toronto Studies, Biol. Series 22:171-188.
17.	Clemens, W. A. 1923. The limnology of Lake Nipigon in 1922. Univ. Toronto Studies, Biol. Series 24:1-12.
18.	Harkness, W. J. K. 1923. The rate of growth and the food of the Lake Sturgeon (Acipenser ribucundus Le Sueur). Univ. Toronto Studies, Biol. Series 24:13-42.
19.	Adamstone, F. B. 1923. The bottom fauna of Lake Nipigon. Univ. Toronto Studies, Biol. Series 24:43-70.

Table A-1 continued on page 35.

Table A-1. Listing of the publications of the Ontario Fisheries Research Laboratory 1922-1956 (continued).

OFRL No.	Citation
20.	Bigelow, N. K. 1923. Further studies of the plankton of Lake Nipigon. Univ. Toronto Studies, Biol. Series 24:71-80.
21.	Bigelow, N. K. 1923. The food of young suckers (Catostomus commersonii) in Lake Nipigon. Univ. Toronto Studies, Biol. Series 24:81-115.
22.	Clemens, W. A. 1924. The limnology of Lake Nipigon in 1923. Univ. Toronto Studies, Biol. Series 25:1-14.
23.	Moore, J. P. 1924. The leeches (Hirudinea) of Lake Nipigon. Univ. Toronto Studies, Biol. Series 25:15-31.
24.	Adamstone, F. B. 1924. The distribution and economic importance of the bottom fauna of Lake Nipigon with an appendix on the bottom fauna of Lake Ontario. Univ. Toronto Studies, Biol. Series 25:33-100.
25.	Clemens, W. A. 1924. Food studies of Lake Nipigon fishes. Univ. Toronto Studies, Biol. Series 25:101-165.
26.	MacKay, H. H. 1924. A quantitative study of the plankton of the shallow bays of Lake Nipigon. Univ. Toronto Studies, Biol. Series 25:167-222, + Plates I and II.
27.	Dymond, J. R. 1926. The fishes of Lake Nipigon. Univ. Toronto Studies, Biol. Series 27:1-108, + Plates I-XI.
28.	Dymond, J. R., and J. L. Hart. 1927. The fishes of Lake Abitibi (Ontario) and adjacent waters. Univ. Toronto Studies, Biol. Series 28:1-19.
29.	Harkness, W. J., and J. L. Hart. 1927. The fishes of Long Lake, Ontario. Univ. Toronto Studies, Biol. Series 28:21-31.
30.	Leonard, A. K. 1927. The rate of growth and the food of the horned dace (Semotilus atromaculatus) in Quebec, with some data on the food of the common shiner (Notropis cornutus) and of the brook trout (Salvelinus fontinalis) from the same region. Univ. Toronto Studies, Biol. Series 28:33-44.
31.	Dymond, J. R. 1928. A description of Leucichthys tullibee (Richardson) based on six specimens from the type locality. Univ. Toronto Studies, Biol. Series (1928):1-6.
32.	Pritchard, A. L. 1928. A preliminary study of the genus Leucichthys in the Canadian waters of Lake Ontario. Univ. Toronto Studies, Biol. Series (1928):7-25.
33.	Dymond, J. R. 1928. Some factors affecting the production of lake trout (Cristivomer namaycush) in Lake Ontario. Univ. Toronto Studies, Biol. Series (1928):27-41.
34.	Hart, J. L. 1928. Data on the rate of growth of pike perch (Stizostedion vitreum) and sauger (S. canadense) in Ontario. Univ. Toronto Studies, Biol. Series (1928):43-55.
35.	Bigelow, N. K. 1928. The ecological distribution of microscopic organisms in Lake Nipigon. Univ. Toronto Studies, Biol. Series (1928):57-74.
36.	Rawson, D. S. 1928. Preliminary studies of the bottom fauna of Lake Simcoe, Ontario. Univ. Toronto Studies, Biol. Series (1928):75-102.
37.	Dymond, J. R., J. L. Hart, and A. L. Pritchard. 1929. The fishes of the Canadian waters of Lake Ontario. Univ. Toronto Studies, Biol. Series (1929):1-36.

Table A-1 continued on page 36.

Table A-1. Listing of the publications of the Ontario Fisheries Research Laboratory 1922-1956 (continued).

OFRL No.	Citation
38.	Pritchard, A. L. 1929. The alewife (Pomolobus pseudoharengus) in Lake Ontario. Univ. Toronto Studies, Biol. Series (1929):39-54.
39.	Marshall, R. 1929. Canadian hydracarina. Univ. Toronto Studies, Biol. Series (1929):55-93, + Plates I-VII.
40.	Rawson, D. S. 1930. The bottom fauna of Lake Simcoe and its role in the ecology of the lake. Univ. Toronto Studies, Biol. Series (1930):1-183, + Plates I-V.
41.	Pritchard, A. L. 1931. Taxonomic and life history studies of the ciscoes of Lake Ontario. Univ. Toronto Studies, Biol. Series (1931):1-78.
42.	Hart, J. L. 1932. Statistics of the whitefish (Coregonus clupeaformis) population of Shakespeare Island Lake, Ontario. Univ. Toronto Studies, Biol. Series (1932):1-28.
43.	Cronk, M. W. 1932. The bottom fauna of Shakespeare Island Lake, Ontario. Univ. Toronto Studies, Biol. Series (1932):29-65.
44.	Ricker, W. E. 1932. Studies of speckled trout (Salvelinus fontinalis) in Ontario. Univ. Toronto Studies, Biol. Series (1932):67-110.
45.	Ricker, W. E. 1932. Studies of trout producing lakes and ponds. Univ. Toronto Studies, Biol. Series (1932) 111-167.
46.	Tester, A. L. 1932. Food of the small-mouthed black bass (Micropterus dolomieu) in some Ontario waters. Univ. Toronto Studies, Biol. Series (1932):169-203.
47.	Tester, A. L. 1932. Rate of growth of the small-mouthed black bass (Micropterus dolomieu) in some Ontario waters. Univ. Toronto Studies, Biol. Series (1932):205-221, + Plate I.
48.	Walker, E. M. 1932. The Odonata (dragonflies) of Lake Nipissing. Univ. Toronto Studies, Biol. Series (1932):223-246.
49.	Ricker, W. E. 1934. An ecological classification of certain Ontario streams. Univ. Toronto Studies, Biol. Series 37:1-114.
50.	Ide, F. P. 1935. The effect of temperature on the distribution of the mayfly fauna of a stream. Univ. Toronto Studies, Biol. Series 39:1-76.
51.	Pritchard, A. L. 1935. The higher aquatic plants of Lake Abitibi, Ontario. Univ. Toronto Studies, Biol. Series 39:77-85.
52.	Pritchard, A. L. 1935. The higher aquatic plants of Shakespeare Island Lake, Ontario. Univ. Toronto Studies, Biol. Series 39:87-96.
53.	Marshall, R. 1935. A new parasitic Unionicola. Univ. Toronto Studies, Biol. Series 39:97-100.
54.	Fry, F. E. J., and W. A. Kennedy. 1937. Report on the 1936 lake trout investigation, lake Opeongo, Ontario. Univ. Toronto Studies, Biol. Series 42:1-20.
55.	Fry, F. E. J. 1937. The summer migration of the cisco, Leucichthys artedi (Le Sueur), in Lake Nipissing, Ontario. Univ. Toronto Studies, Biol. Series 44:1-91.
56.	Langford, R. R. 1938. Diurnal and seasonal changes in the distribution of the limnetic crustacea of Lake Nipissing, Ontario. Univ. Toronto Studies, Biol. Series 45:1-142.

Table A-1 continued on page 37.

Table A-1. Listing of the publications of the Ontario Fisheries Research Laboratory 1922-1956 (continued).

OFRL No.	Citation
57.	Langford, R. R. 1938. The food of the Lake Nipissing cisco, Leucichthys artedi (Le Sueur) with special reference to the utilization of the limnetic crustacea. Univ. Toronto Studies, Biol. Series 45:143-190.
58.	Fry, F. E. J. 1939. A comparative study of lake trout fisheries in Algonquin Park, Ontario. Univ. Toronto Studies, Biol. Series 46:1-69.
59.	Ide, F. P. 1940. Quantitative determination of the insect fauna of rapid water. Univ. Toronto Studies, Biol. Series 47:1-20, + Plates I-IV.
60.	Miller, R. B. 1941. A contribution to the ecology of the chironomidae of Costello Lake, Algonquin Park, Ontario. Univ. Toronto Studies, Biol. Series 49:1-63.
61.	Fry, F. E. J. 1943. A method for the calculation of the growth of fishes from scale measurements. Univ. Toronto Studies, Biol. Series 51:5-18.
62.	Kennedy, W. A. 1943. The whitefish, Coregonus clupeaformis (Mitchill), of Lake Opeongo, Algonquin Park, Ontario. Univ. Toronto Studies, Biol. Series 51:21-66.
63.	Brett, J. R. 1944. Some lethal temperature relations of Algonquin Park fishes. Univ. Toronto Studies, Biol. Series 52:3-49.
64.	Brett, J. R. 1946. Rate of gain of heat-tolerance in goldfish (Carassius auratus). Univ. Toronto Studies, Biol. Series 53:5-28.
65.	Bangham, R. V., and C. E. Venard. 1946. Parasites of fish of Algonquin Park lakes. Univ. Toronto Studies, Biol. Series 53:31-46.
66.	Fry, F. E. J., J. S. Hart, and K. F. Walker. 1946. Lethal temperature relations for a sample of young speckled trout, Salvelinus fontinalis. Univ. Toronto Studies, Biol. Series 53:5-35.
67.	Tchang-Si, and Yung-Pin Lu. 1946. On the artificial propagation of Tsing-fish, Matsya sinensis (Bleeker) from Yang-Tsung Lake, Yunnan Province, China. Univ. Toronto Studies, Biol. Series 54:37-47.
68.	Fry, F. E. J. 1947. Effects of the environment on animal activity. Univ. Toronto Studies, Biol. Series 55:1-62.
69.	Sprules, W. M. 1947. An ecological investigation of stream insects in Algonquin Park, Ontario. Univ. Toronto Studies, Biol. Series 56:1-81.
70.	Martin, W. R. 1949. The mechanics of environmental control of body form in fishes. Univ. Toronto Studies, Biol. Series 58:1-91, + XVIVp.
71.	Hoar, W. S., V. S. Black, and E. C. Black. 1951. Some aspects of the physiology of fish. Univ. Toronto Studies, Biol. Series 59:1-111, + IVp.
72.	Hart, J. S. 1952. Geographic variation of some physiological and morphological characteristics in certain freshwater fish. Univ. Toronto Studies, Biol. Series 60:1-79.
73.	Job, S. V. 1955. The oxygen consumption of Salvelinus fontinalis. Univ. Toronto Studies, Biol. Series 61:1-39.
74.	Graham, J. J. 1956. Observations on the alewife, Pomolobus pseudoharengus (Wilson), in fresh water. Univ. Toronto Studies, Biol. Series 61:1-43, + VIp.

ONTARIO FISHERIES TECHNICAL REPORT SERIES

Ontario Fisheries Technical Report Series Guidelines.
C. G. Parkes and C. I. Goddard. 1981.

No. 1 Emergence and survival of lake trout (*Salvelinus namaycush*) and brook trout (*S. fontinalis*) from artificial substrates in an acid lake.
J. M. Gunn and W. Keller. 1981.

No. 2 Larval fish sampling in Lake Huron, 1978.
D. H. Loftus. 1982

No. 3 Zooplankton in brook trout lakes of Algonquin Park, Ontario.
E. Jermolajev and J. M. Fraser. 1982.

No. 4 Proceedings of the 1980 North American Eel Conference
Ontario Ministry of Natural Resources. 1982.

No. 5 The population dynamics of lake trout (*Salvelinus namaycush*) in Lake Manitou, in relation to the planting and spawn-taking operation.
B. A. Henderson. 1982.

No. 6 Survival and growth of matched plantings of lake trout (*Salvelinus namaycush*), brook trout (*Salvelinus fontinalis*), and lake x brook F_1 splake hybrids in northeastern Ontario lakes.
P. E. Ihssen, M. J. Powell and M. Miller. 1982.

No. 7 The performances of two wild and two hybrid strains of brook trout planted in an infertile, acidic lake.
J. M. Fraser. 1983.

No. 8 Decomposition of wild rice (*Zizania aquatica L.*) straw and its effect on the depletion of oxygen during winter in natural lakes of northwestern Ontario.
Pritam Sain. 1983.

No. 9 Annulus formation and growth characteristics of tagged walleye in a lightly exploited lake.
D. Baccante and J. Sandhu. 1983.

No. 10 An evaluation of climatic, morphoedaphic, and effort data as predictors of yields from Ontario sport fisheries.
D. A. Schlesinger and A. M. McCombie. 1983

POOR

QUALITY

ORIGINAL